

## University of Dundee

Drink Drive – taking stock, moving forward

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# DRINK DRIVING

## TAKING STOCK, MOVING FORWARD



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Responsibility for the report's contents and conclusions lies with PACTS and the authors. The report does not necessarily reflect the views of the advisory panel or others who contributed to the research.

# An independent report by PACTS

This is an independent report by PACTS and its project research partners – the University of Stirling and the University of Dundee. The topic was proposed, and the scope defined, by PACTS. The DfT provided the funding to enable the project and DfT staff were kept informed of the findings. For avoidance of doubt, it is a PACTS report and DfT has not influenced or endorsed the report recommendations.

# About PACTS

The Parliamentary Advisory Council for Transport Safety (PACTS) promotes evidence-based solutions to achieve safe transport for all. Established in 1981, its founder members were responsible for the legislation which made it compulsory to wear seat belts in the fronts of cars in Britain. The unique features of PACTS are that it is a multi-modal transport safety body and focuses on working with UK parliamentarians, government, professionals and other key stakeholders. It is independent and has no financial or sectoral interests. PACTS is a charity with over 100 member organisations – our partners – who are all committed to improving safety for people on our roads, railways and when flying. Members provide PACTS with technical and business insights, advice and support. We assist them through our information, events, networking and more. If you would like information about the benefits of PACTS membership for your organisation, please visit <http://www.pacts.org.uk/about/> or contact PACTS.

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## Foreword

It is ten years since Sir Peter North's major review of drink and drug driving law in Great Britain was published. Sir Peter acknowledged the progress made in reducing drink drive deaths but also pointed out how they still compared unfavourably with deaths from knife crime or fires. He called for major changes, with 51 recommendations.

The incoming Coalition government accepted the challenging recommendations on drug driving whilst opting to improve the efficiency of enforcement for drink driving. Amongst other measures, it removed the option whereby a driver could demand a blood test and relaunched drink drive rehabilitation courses.

Sir Peter North's most high-profile recommendation – to reduce the legal drink drive limit from 80 milligrammes of alcohol per 100 millilitres of blood to 50mg – was rejected. Enforcement of the current limit and education campaigns remains the policy of the government today. In fairness, previous governments of all parties had maintained this policy. Scotland is the exception where, in December 2014, the limit was reduced by the Scottish Government to 50mg of alcohol per 100ml of blood, under its new devolution powers.

In the years since 2010, the long-term reduction in total road deaths in Great Britain has largely ceased. Drink driving (involving a driver who exceeded the legal limit) has remained one of the largest single causes, at around 13%. Some 240 people die each year – drivers, pedestrians, young people and old, men and women. This cannot be viewed as a success.

Much of the debate has focused – to little effect – on the legal drink drive limit. Whilst this is important, it is by no means the only aspect that matters. PACTS therefore proposed to the Department of Transport a broad review into the nature of the current problem and the policy options available.

The PACTS report is not on the scale of the North report, which followed a major public inquiry, but it is ambitious, addressing a wider range of issues and interventions. It confirms the importance of police enforcement, backed by education. It also points to some uncomfortable weaknesses in the current system. Drink drivers too often continue driving for long periods before their cases come to court; significant doubts exist about compliance with driving bans; and there are growing indications that drink driving is on the rise as police numbers and enforcement are cut back.

A question in our minds was the extent to which the problem was one of drivers who sometimes drink, or drinkers who sometimes drive? If the latter, could public health policies play a bigger role. If a public health approach can help combat knife crime, perhaps it could contribute to tackling drink driving? We partnered researchers at the University of Stirling who undertook in-depth interviews with drivers who admitted, in confidence, to drink driving. Some had been prosecuted, most had not. The extent of alcohol and mental health issues that many of these people experienced, and their propensity to drink drive, was alarming.

This report addresses these issues of the legal framework, including the blood alcohol limit, police enforcement, education and public health interventions. It makes a number of recommendations and calls for a wide-ranging public consultation and policy review.

This may seem overambitious but there are indications that the time is right. The joint review of roads policing is firmly underway. As we emerge from the coronavirus pandemic, there is a clear ambition on the part of government and the public for change and a better future. The Prime Minister has indicated his intention to expand the number of police and health workers. If the government wants Britain to be a global leader, and to maintain its reputation for road safety, this is an opportunity that it needs to seize.

### David G Davies

Executive Director, PACTS





## Executive summary

Tackling drink driving is often cited as a major road safety success story. Since the link between alcohol consumption and traffic collision risk was first established in 1964, drink drive casualties have greatly reduced and public attitudes changed fundamentally. In the UK, this is attributed to long-term public education and awareness campaigns, backed by a sound legal framework, police enforcement, a tough penalty regime, technological advances, rehabilitation courses, and more – developed over decades and based on extensive research and monitoring.

Fifty years later, however, progress in Great Britain seems to have come to a halt. Since 2010, around 240 people have died each year in collisions involving a driver who was over the legal drink drive limit. Drink driving remains one of the biggest single causes of fatal collisions, at around 13%. It is often combined with other high-risk behaviours such as not wearing a seat belt.

During this decade the government's policy has been to make enforcement of the existing law more efficient and to continue with education and behaviour change campaigns, mainly targeted at young male drivers. It has implemented many – though not all – of the legislative recommendations in the 2010 North report.

PACTS suggested to the Department for Transport that the “plateau” in drink drive deaths might benefit from an analysis of the nature of the current drink drive problem and, potentially, a broader and refreshed intervention strategy. The Department agreed to fund this study, which seeks to address both these matters.

This report draws on published data to summarise recent trends in casualties and police enforcement activity, and provide an overview of the profile of drink drivers. It shows that drink drivers in the UK are more likely to be male and are younger than the general driving population (though age differences have become less pronounced over the last 20 years). Drink driving is also more common in urban areas and drink drivers are more likely to have a higher socio-economic status. Drink drivers are also more likely to have a criminal record than the general driving population, though less likely than many others who commit other motoring offences (such as drug drivers).

### Key statistics

- Drink driving is one of the biggest causes of road deaths (13%)
- In the last decade 240 people have been killed each year where a driver was over the limit
- Levels of police enforcement have decreased by 63% since 2009
- Nearly one in five (17%) drink drive offences is committed by a reoffender
- The coronavirus pandemic has seen an increase in the number of people with alcohol and mental health issues.

The report draws on research to describe the impact of alcohol issues and poor mental health on drink driving behaviour. This includes the reasons that underlie decisions about drink driving, considering why people choose to drive after drinking and why they choose to drink whilst knowing they have to drive. Drink drivers consume alcohol more often than the general population. Drink drivers also consume a higher volume of alcohol each time they

drink than the general driving population. Drink drivers, particularly reoffenders, are also significantly more likely to have alcohol issues than other drivers. Drink drivers also have more mental health issues than the general population.

An aim of the research was to dig beneath the statistics, particularly to better understand the contribution of health issues. PACTS partnered with researchers at the University of Stirling who had contributed to analysis of the impacts of the change in the drink drive limit in Scotland. They undertook in-depth interviews with 30 volunteers who admitted, in confidence, to drink driving. This provided a rich, qualitative dimension to the study.

External experts, stakeholders and the project's advisory panel provided PACTS with information on emerging trends in drink driving, the legal process regarding drink driving and examples of best practice from around the world.

Based on these findings, and on international experience and research, the report evaluates the impact that potential interventions could have on reducing drink driving, including both conventional road safety interventions, such as enforcement, as well as public health strategies, including rehabilitation programmes and policies to reduce alcohol supply.

The report concludes that the UK's system to prevent drink driving is no longer adequate. It recommends a comprehensive review, with a broad-based strategy, encompassing legal changes, enhanced enforcement, wider use of new technology, public health measures, media campaigns and additional research.

Conventional road safety efforts can still have a significant impact on drink driving. Increasing the level of enforcement, particularly if police are given the power to conduct mandatory breath tests and make use of mobile evidential breath testing instruments, has the potential to reduce drink driving. Media campaigns also have a role to play, particularly by amplifying drivers' perceptions of enforcement levels and to influence long-term public attitudes. However, enforcement alone is not adequate.

The influence of poor mental health and alcohol issues on drink driving should be considered when designing interventions aimed at reducing drink driving. Not all drink drivers have alcohol issues but, alcohol issues do lead many people to drink driving. These drivers are unable to separate their need to drink from their need to drive and as a result, unless their alcohol issues are addressed, they are unlikely to stop drink driving. Reforms to the High Risk Offender scheme should be considered. Assessment such as diagnostic interviews or Alcohol Use Disorders Identification Tests could help to identify high risk offenders more accurately. Incentivising treatment for alcohol issues in sentencing could also help to reduce reoffending.

More broadly, this report shows the value of public health perspectives in drink drive policy. Drink driving should be considered in wider discussions of policies aimed at reducing alcohol harm and these interventions should be monitored in terms of their impacts on drink driving. Medical professionals can play a vital role in identifying people with alcohol issues and the evidence suggests that there is a need to raise awareness among medical professionals of the guidance issued by professional bodies on informing the DVLA of a patient's alcohol issues.

Many in the road safety profession, and more widely, believe that the single most important measure would be to reduce the legal drink drive limit in England and Wales, as Scotland has done. While it is not sufficient on its own, PACTS believes that a lower limit would have a totemic impact and long-term benefit. The dangers of driving with even low levels of drink and drugs make a lower limit more relevant. While drink drive deaths remain unchanged, the government will be forever criticised for being out of step with other countries that

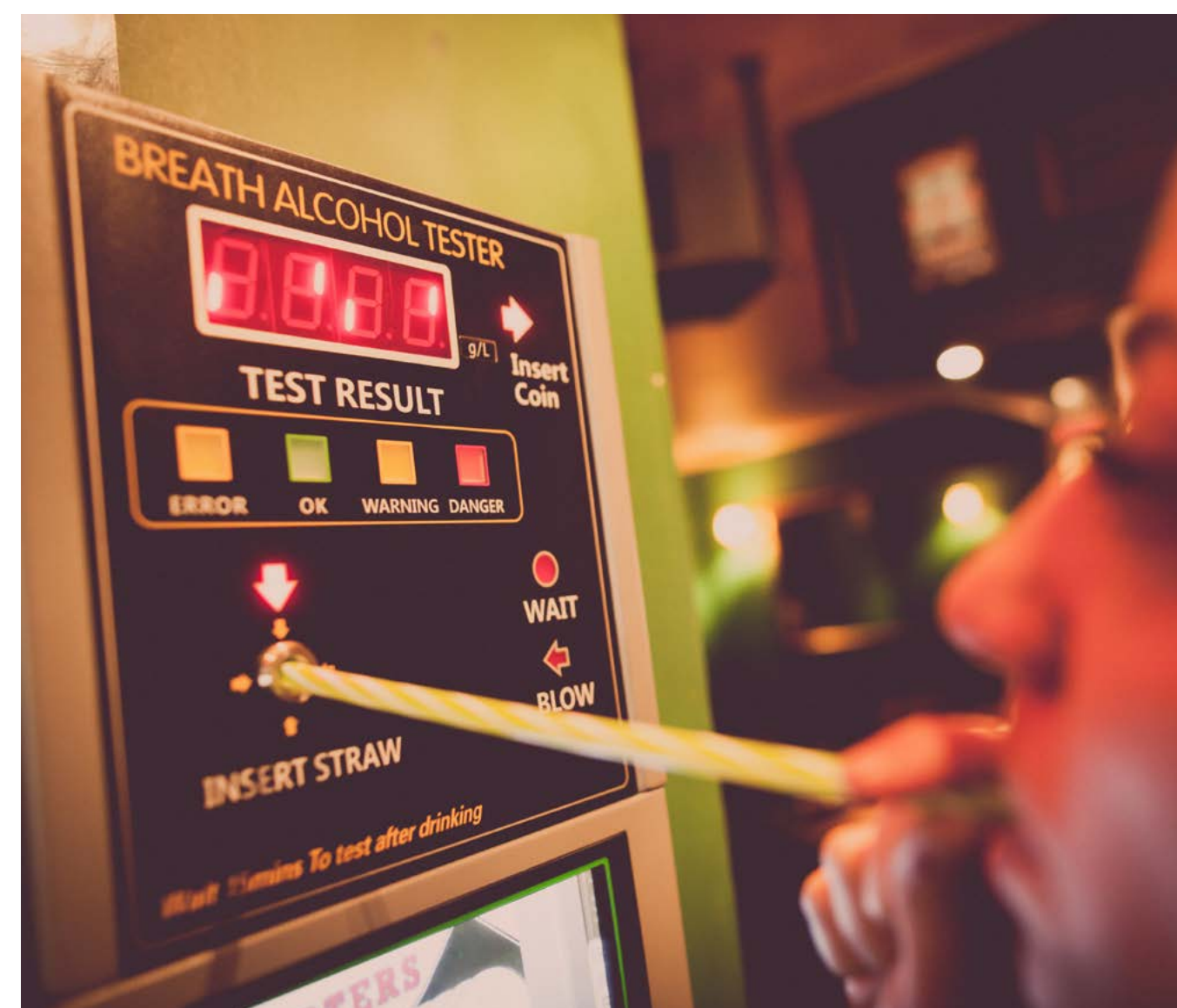
prioritise road safety. The limit should be reduced in line with Scotland, with a “zero” limit for professional, young, and novice drivers. The experience of Scotland shows that it has public support and that fears about economic damage to pubs, or overloading the police and courts, are unfounded. It can be debated just how much effect this would have but the issue cannot be avoided.

During the coronavirus pandemic the number of people with alcohol and mental health issues has increased. Moreover, while public transport use has decreased dramatically, traffic volumes have returned to near pre-pandemic levels. Both these trends raise concerns because they may lead to increased drink driving. Some police forces have reported increased drink driving during the pandemic, though it is unclear if this is because drink driving has increased, drink drivers are more obvious with reduced traffic, or more resources are available for roads policing. Drink drive deaths have also increased overseas, such as in the USA, during the pandemic. The impact of the pandemic on drink driving should be closely monitored, and the Government should make plans to provide additional support for people with alcohol and mental health issues and encourage public transport use when appropriate.

Above all, this report demonstrates the need for a broad strategy to reduce drink driving, which includes both public health and conventional road safety interventions. This strategy should address the underlying causes of drivers’ decisions to drink drive, significantly increase drivers’ perception of their chance of being caught if they do drink drive and offer support for vulnerable people.

## CHAPTER 1

# Introduction



The dangers of drink driving have been quantified since at least 1964 when a clear link was established between alcohol consumption and traffic collision risk.<sup>1</sup> In 1967, a blood alcohol concentration (BAC) limit for drivers in the UK was introduced by the Road Safety Act.

From 1979, when accurate monitoring was introduced, to 2018, casualties involving drivers over the legal drink drive limit decreased by 85%, from a high of 1,640 drink drive deaths. Combating drink driving is seen as one of the major successes of road safety as well as of campaigns to significantly change public attitudes and behaviour. Indeed, many road safety professionals state that drink driving has become socially unacceptable in the UK and it is cited as a model for changing public attitudes towards other dangerous driving behaviours, such as speeding. However, the problem has not been eliminated. There were 240 drink drive deaths in 2018 (13% of all road deaths) and a further 1370 serious injuries. These figures exclude an estimated 50 additional deaths involving drivers impaired by alcohol yet below the legal limit.<sup>2</sup> These numbers have not fallen since 2010, showing a decade of stagnation after years of progress.

## 1.1 UK policy 2010-2020

The North Report, published in 2010, was commissioned by the previous Secretary of State for Transport and intended to be a study of the legal framework covering drink and drug driving in Great Britain. In particular it was asked to consider

- the legal framework applying to drink and drug driving in Great Britain;
- the evidence on the nature of the drink and drug driving problems which the nation faces;
- the evidence on the impact of potential measures to reduce drink and drug driving casualties;
- discussions with, and representations received from, interested groups and individuals.

The report made 28 recommendations on drink driving which included ensuring that coroners routinely provide data on the presence of alcohol in road fatalities, removing the statutory option allowing some drink drivers to request a blood test, reforms to improve the efficiency of the legal process, and recommending that magistrates consider permanent bans for repeat drink drive offenders.

The North Report also recommended lowering the drink drive limit to 50mg of alcohol in 100ml of blood. The incoming UK government rejected this recommendation, stating that 'widening the scope of the drink-drive offence by lowering the limit is consistent with [its] approach' of 'help[ing] the police to focus on the most dangerous people' while also highlighting potential social and economic costs.<sup>3</sup> Contrastingly, the Scottish Government lowered the drink drive limit to 50mg of alcohol in 100ml of blood in December 2014.

Following the publication of the North Report the government reiterated its commitment to deterring drink driving. They stated that 'our priority must be to give the police the means to protect law-abiding road users with measures that are efficient and effective, concentrating on those who are the most danger to themselves and other road users'. In response to the North Report the government also committed to implementing the following measures on drink driving.

- revoke the right people have to opt for a blood test when their evidential breath test result is less than 40% over the limit (the 'statutory option');
- streamline the procedure for testing drink-drivers in hospital;
- close a loophole used by high risk offenders to delay their medical examinations;
- require serious drink-drivers to take remedial training and a linked driving assessment – as well as a medical examination - before recovering their licence;
- re-launch the drink-drive rehabilitation scheme under which drink-drivers can obtain reduced driving disqualifications;
- approve portable evidential breath testing equipment for the police;
- provide for preliminary testing not to be required where evidential testing can be undertaken away from the police station;
- seek opportunities to collect better information about the prevalence of drink and drug driving, and its implication in casualty accidents.<sup>4</sup>

The government has implemented many of these commitments, including removing the 'statutory option' though serious offenders are not yet required to undertake remedial training and portable evidential breath testing equipment is not yet type approved by the Home Office. The government has funded a competition aimed at encouraging the development of mobile evidential breath testing instruments (MEBTI) run by PACTS. One company submitted instruments to Dstl for final testing in 2020. PACTS understands that one or more other companies intend to do so in 2021. Home Office type approval would then normally follow within a few months, in which case, MEBTI could be available to police forces in 2022. A study of the feasibility of a trial of alcohol interlocks has also been funded by the government; PACTS will report in 2021.<sup>5</sup>

Government policy on drink driving has also focused on enforcement and education. Christmas and Summer drink drive campaigns have been run by the National Police Chiefs Council and THINK! campaigns, such as the 'Mates Matter' campaign have focused on drink driving. However, due to cuts to roads policing, in England and Wales the number of roadside breath tests conducted has fallen by 63% from a high of 815,290 in 2009 to just 302,281 in 2019, the lowest since records began in 2002.<sup>6</sup>

Two other important part of the government's drink drive strategy are the High Risk Offender Scheme and Drink Drive Rehabilitation Courses. A drink drive rehabilitation course is currently offered to many of those in Great Britain who plead guilty to a drink drive offence and are banned from driving for 12 months or more. The course can cost up to £250. Having taken a course, the offender's driving ban is usually reduced by a quarter. A similar scheme is run in Northern Ireland, though at lower cost (up to £160). The course is taken in person (though some have been completed virtually during the coronavirus pandemic) and in groups. It takes places over 16 hours (typically on three days spread over three weeks). In 2012 changes were made to how the drink drive rehabilitation course was run, with a more formal process for approving providers put into place, and monitoring and auditing of courses increased.<sup>7</sup>

People convicted of drink driving are place on the High Risk Offender scheme if they have:

- been convicted of two drink driving offence within ten years,

<sup>1</sup> Borkenstein, R.F., Crowther, F.R., Shumate, R.P., Ziel, W.B. & Zylman, R. (1964). *The role of the drinking driver in traffic accidents*. Department of Police Administration, Indiana University.

<sup>2</sup> Allsop, R., (2015). *Saving Lives by Lowering the Legal Drink-Drive Limit*. PACTS/RAC Foundation

<sup>3</sup> The Government's Response to the Reports by Sir Peter North CBE QC and the Transport Select Committee on Drink and Drug Driving (publishing.service.gov.uk) (2011)

<sup>4</sup> The Government's Response to the Reports by Sir Peter North CBE QC and the Transport Select Committee on Drink and Drug Driving (publishing.service.gov.uk) (2011)

<sup>5</sup> <https://www.pacts.org.uk/2020/05/new-pacts-research-project-alcohol-interlocks/>

<sup>6</sup> Home Office. *Police Powers and Procedures, England and Wales*.

<sup>7</sup> DVSA. (Undated). *Drink-drive rehabilitation scheme course syllabus*. DVSA.



- were driving with an alcohol reading of at least 87.5 microgrammes of alcohol per 100 millilitres (ml) of breath, 200 milligrammes (mg) of alcohol per 100 ml of blood, or 267.5 mg of alcohol per 100 ml of urine,
- refused to give the police a sample of breath, blood or urine to test for alcohol, or
- refused to allow a sample of blood to be analysed for alcohol (for example, if the sample had been taken when they were incapable of giving consent).

Having been placed on the scheme an offender must reapply for their licence and pass a medical examination which includes an examination with a doctor and a blood test.<sup>8</sup>

The number of drink drive deaths has not fallen since 2010. This suggests that current drink driving policies and interventions are not making sufficient inroads. Moreover, there is neither an up-to-date overview of the drink drive “problem”, nor a comprehensive strategy to address it. PACTS therefore proposed a detailed reassessment of the problem and policy options. Our proposal to the Department for Transport was approved and they have funded this study. For avoidance of doubt, it is a PACTS report, and the Department has not influenced or endorsed the report recommendations.

## 1.2 Research purpose

This research project, conducted by PACTS in partnership with the University of Stirling and University of Dundee, is a multi-disciplinary review of recent drink driving trends, practice and interventions in the UK. The research aims to provide new, up-to-date insights into the behaviour, mind-set and circumstance of drink drivers, by drawing from in-depth interviews with drink drive offenders in England and Scotland. This will provide a stronger understanding of the reasons for drink driving, and the likely effectiveness of various interventions.

The study has assembled and analysed evidence on the following lines of inquiry regarding drink driving:

- The scale and trends in the road casualties involving drink drivers
- The profile of drink drivers
- Police drink drive intelligence and enforcement activity
- Judicial activity (prosecutions, convictions, sentencing, rehabilitation courses, etc.)
- The perceptions of drink drivers and their reasons for drink driving, including alcohol dependence
- Developments in drink drive policy and interventions.

The insights and evidence in this report come from information provided to PACTS by key experts, stakeholders and practitioners; in-depth interviews with drink drive offenders in England and Scotland undertaken by the University of Stirling and University of Dundee; and literature reviews conducted by PACTS and the University of Stirling.

<sup>8</sup> <https://www.gov.uk/driving-disqualifications/disqualification-for-drink-driving>

## 1.3 Alcohol Limit

**In England, Wales and Northern Ireland, the alcohol limit for drivers is 80 milligrammes of alcohol per 100 millilitres of blood, equivalent to 35 micrograms per 100 millilitres of breath, or 107 milligrammes per 100 millilitres of urine. In Scotland, since December 2014, the limits are 50, 22 and 67 respectively<sup>9</sup>**

**The Northern Ireland Assembly legislated in 2016 to reduce the BAC limit to 50 milligrammes of alcohol per 100 millilitres of blood, with a lower limit of 20 milligrammes for learner, novice and professional drivers.<sup>10</sup> This has yet to come into force.**

**Unless otherwise noted, the alcohol limit is discussed in this report as grammes of alcohol per 100 millilitres of blood e.g. the current limit in England, Wales and Northern Ireland is 0.08.**

<sup>9</sup> The drink drive limit - GOV.UK ([www.gov.uk](http://www.gov.uk))

<sup>10</sup> Road Traffic (Amendment) Act (Northern Ireland), 2016.

## CHAPTER 2

# Methodology



## 2.1 Literature review

References to research literature and other robust sources are used throughout this report to provide context and inform the discussion, particularly in relation to potential interventions.

Searches were conducted of the academic literature on drink driving, the profile of drink drivers, treatment of alcohol issues and interventions to reduce drink driving. This involved using Google Scholar, ProQuest and Web of Science searches and the citations and bibliographies of relevant documents. Searches were also conducted of key government and parliamentary documents on drink driving at a UK, European and global level were also conducted. These included reviews of drink driving and assessments of policy options. Studies were found from the EU, Austria, Denmark, France, the Netherlands, Norway, Sweden, Switzerland, Canada, the USA, Australia, and New Zealand. Finally, members of PACTS' network and the project's advisory panel were asked to provide relevant articles and documents. Studies were screened at title, abstract and at full text.

Evidence was prioritised based on relevance to the current situation regarding drink driving in the UK. More recent research has been prioritised as has research from other countries with similar drink driving laws and levels of drink driving. 105 studies were included in this report. Appendix 1 provides details on search terms and studies included.

Information from the literature was used to provide insights into the profile of drink drivers, reasons for drink driving and how effective different interventions aimed at reducing drink driving could be.

## 2.2 Interviews and information requests

In-depth semi-structured interviews were conducted with road safety and alcohol experts as well as with roads police officers and those who work directly in alcohol treatment. Interviewees included people with expertise on drink driving in the UK, USA, Canada, Australia, New Zealand and Europe. These interviews were conducted in person or over the phone by at least one member of PACTS' staff and lasted between 30 and 90 minutes. Notes were made on the interviews. They were followed up with email requests for further information when necessary. Interviews provided information on best practice on reducing drink driving across the world, they also provided insight into the profile of drink drivers and reasons for drink driving.

An extensive appeal for information for was made to local authorities. Information requests on campaigns, interventions and research on drink driving and alcohol harm reduction were sent to all local authority road safety teams listed by Road Safety GB and to all local authority public health teams. Interviews were then conducted with 10 local authorities. This provided information on campaigns being run at a local level and the profile of drink drivers across the UK. Information from these interviews is included in the 'Potential interventions' section of the report.

## 2.3 Data

Data were obtained from a number of sources. Stats19 road casualty data were used as the primary source of casualty data, both from the published Reported Road Casualties Great Britain annual reports and from further analysis of underlying data. Stats19 data are recorded by police forces, either from having visited the scene or from reports from the public. PACTS has also obtained data on fixed penalty notices (FPNs) issued and breath tests conducted from Police Powers and Procedures, England and Wales; Recorded Crime in Scotland; and

Police Service of Northern Ireland Recorded Crime Statistics. Survey data from the Crime Survey for England and Wales, National Travel Attitudes Survey and RAC Report on Motoring were collated. PACTS also requested a received data from the Driver and Vehicle Licensing Agency (DVLA) on drink/drug driving and reoffending and the number of people who have their licence revoked as a result of alcohol issues. Data were used to provide insight on the profile of drink drivers in the UK, the effectiveness of current drink drive policy, and the scope for improvement offered by different interventions.

## 2.4 In-depth interviews with drink drivers

Semi-structured interviews were conducted with participants in the UK who admitted to drink driving on more than one occasion in the past and volunteered to be interviewed.

Adults from the UK who had previously been involved in drinking and driving were sampled. Individuals were included if they were current or former drivers who: i) had one or more drink driving convictions, those who had drunk and driven more than once, and did or did not have an underlying alcohol problem; or ii) had not been convicted of drink driving but reported drinking and driving on more than one occasion in the past, and did or did not have an underlying alcohol problem. Once an individual confirmed their interest in participating in the study, they were invited to take part in a semi-structured interview, either by telephone or face-to-face. Interviews were then transcribed verbatim by professional transcribers. The data were analysed thematically. Researchers independently coded the same five transcripts that were initially cross-checked, using an inductive approach. Interviewees are referred to as 'participants' in this report. This methodology is set out in more detail in 'Methodology' in Section 'An exploration of the characteristics, perceptions and experiences of drink drivers in the United Kingdom'.

## 2.5 Advisory panel

PACTS set up an advisory panel which provided input throughout the project. The panel consisted of ten experts from the fields of roads policing, road safety and alcohol studies. Panel members were asked to share their expertise, recommend key documents and other sources for research, and provide feedback on PACTS' project plans, findings and report drafts.

## 2.6 Terminology

**Throughout the report those who drive while over the legal drink drive limit are referred to as 'drink drivers' or those who 'drink drive'. Those who have consumed alcohol before driving but may not be over the legal limit are referred to as those who 'drink before driving' or who 'drive after drinking'.**

## CHAPTER 3

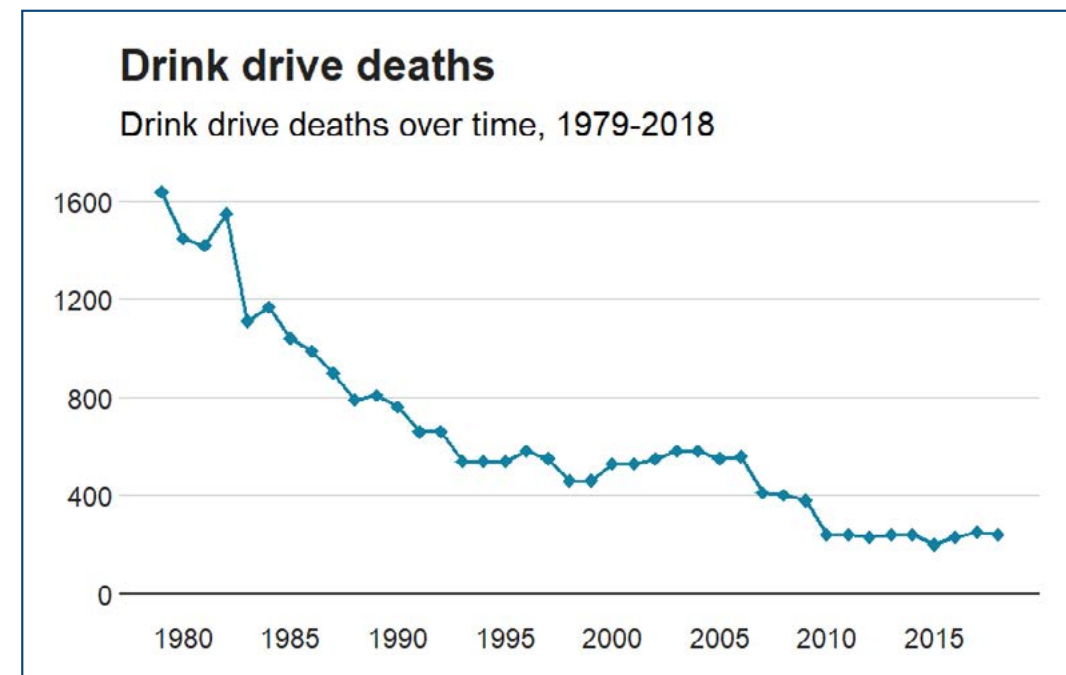
# Casualty data





### 3.1 Number of deaths each year

**SUMMARY:** The number of drink drive deaths has fallen significantly since the 1970s, but the decline ceased in 2010.

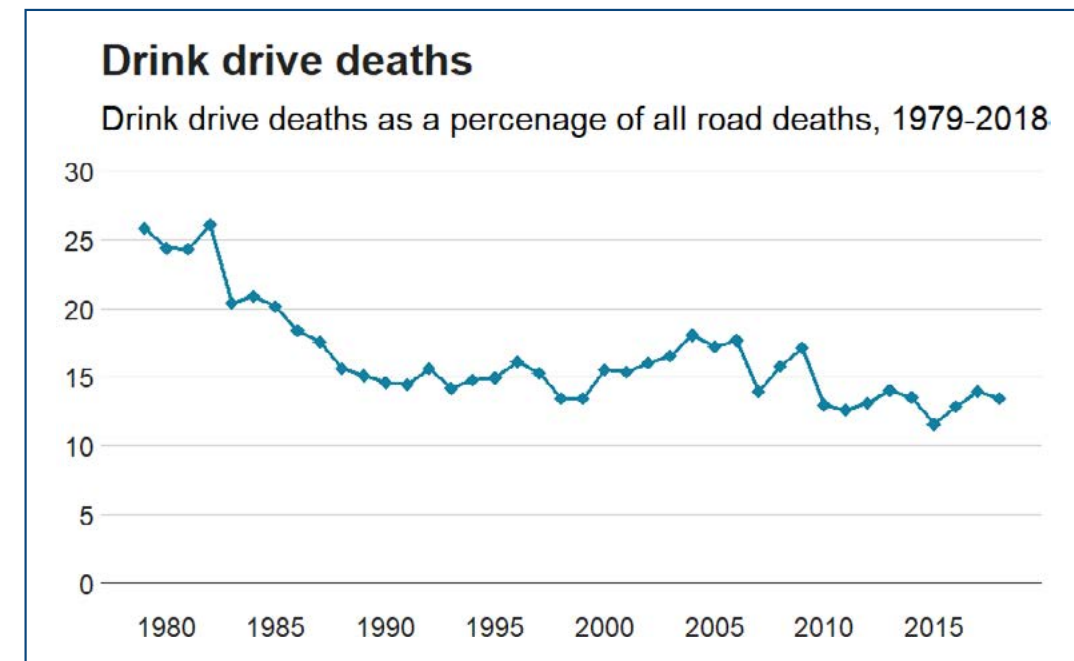


**Figure 1:** Number of drink drive deaths over time (data from Reported Road Casualties Great Britain, including supporting tables and estimates involving illegal alcohol levels (hereafter RRCGB))

In 2018, 240 people were killed in collisions in which a driver was over the legal BAC limit or refused a test. This represents a substantial fall from the 1,640 people that were killed in drink drive related collisions in 1979. However, since 2010, no progress has been made. The number of drink drive related deaths has remained stable at around 240 deaths a year since 2010 (Figure 1). Further information about the profile of those killed is available in Section 'Profile of drink drivers.'

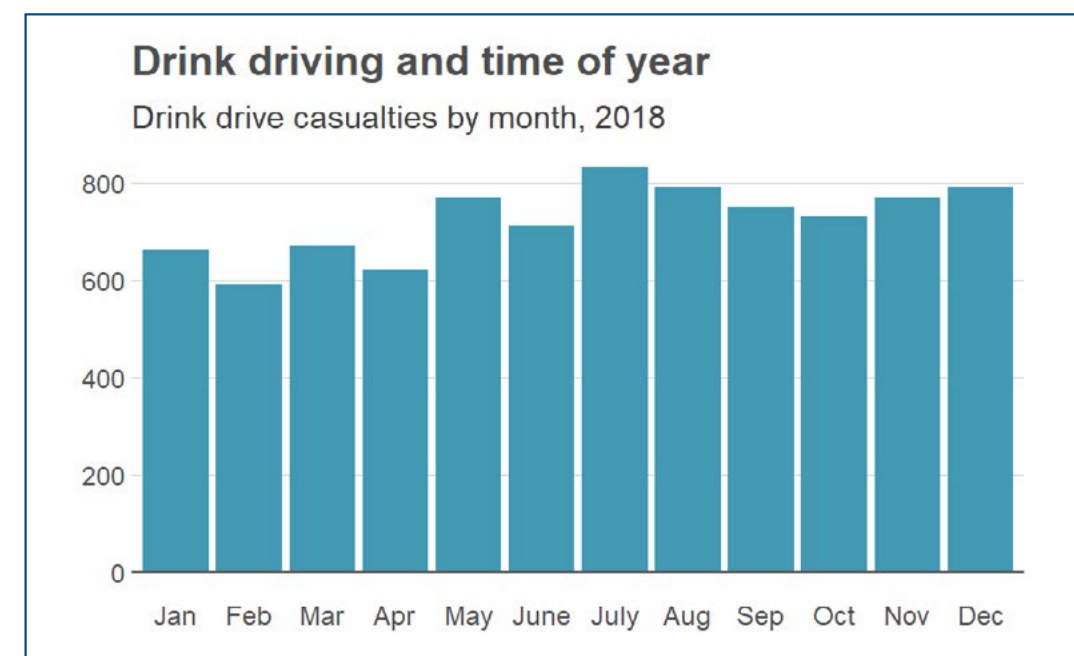
All casualty figures are from 'Reported Road Casualties in Great Britain: estimates involving illegal alcohol levels,' unless otherwise noted. Figures in this report are estimates based on Stats19 forms completed by police, plus toxicology data from coroners and procurators fiscal. Figures are rounded to the nearest ten because of uncertainty regarding estimates. The figures are National Statistics: more information on the methodology used to produce them can be found in 'Reported road casualties in Great Britain: final estimates involving illegal alcohol levels: 2018'. Since 2000, the Department for Transport has presented these figures with 95% confidence limits to reflect the uncertainty of the estimate; the width of the confidence interval has changed little from year to year. In 2018 these limits were 220 (lower 95% confidence limit) and 260 (higher 95% confidence limit). This means we can say with 95% degree of confidence that the true figure for the number of drink drive deaths was between 220 and 260 in 2017.

Drink drive deaths as a percentage of all road deaths have decreased from 26% in 1979 to 13% in 2018 (Figure 2). This reduction in drink drive deaths as a percentage of all road deaths has been less uniform than the reduction in drink drive deaths with the percentage reaching 13% in 1998. While variation has continued year to year, drink drive deaths have constituted between 12 and 18% of road deaths since 1986.



**Figure 2:** Drink drive deaths as a percentage of all road deaths from 1979 to 2018 (RRCGB)

### 3.2 Monthly



**Figure 3:** Number of drink drive deaths in each month, 2018 (RRCGB)

The number of drink drive casualties (all injuries, including deaths) has tended to be higher in the summer months. It has generally been lower in the early months of the year (Table 1). There is also significant variation in which months have a higher number of casualties, for example, October had the highest number of casualties between 2010 and 2014 and the second lowest in 2017. December by contrast, had the third lowest number of casualties between 2010 and 2014 and the second highest between 2017 and 2018. These variations over the year and between years are appreciably greater than could arise from the random variation in the monthly numbers.



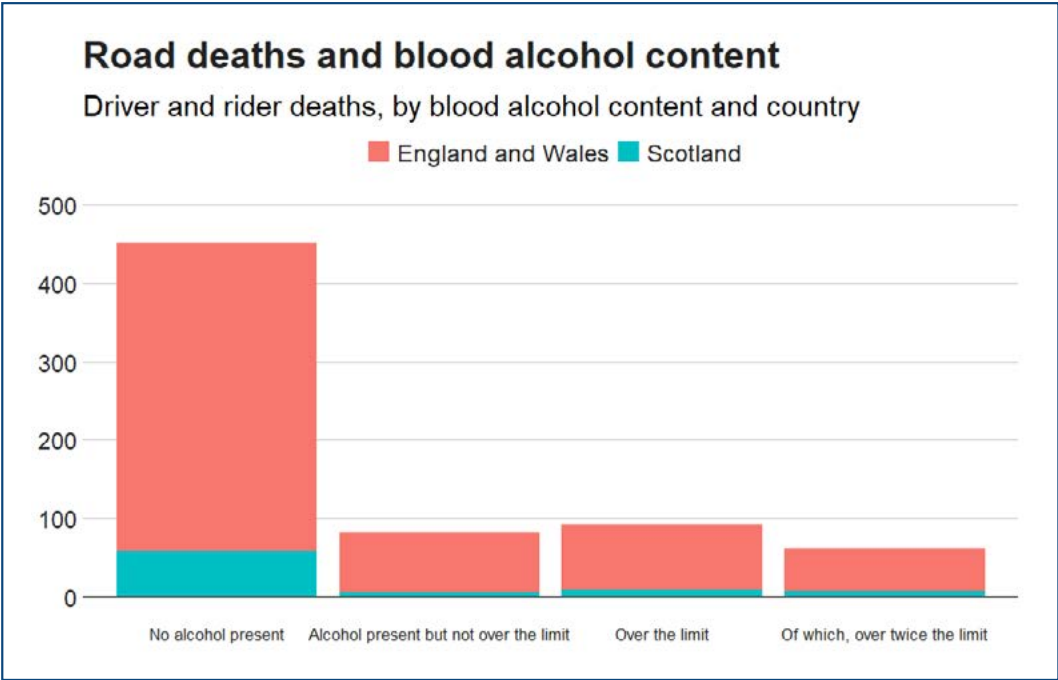
**Table 1:** Number of drink drive deaths by month and year (RRCGB)

	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC
<b>2010-14 AVERAGE</b>	660	680	740	760	810	770	780	840	760	850	810	730
<b>2015</b>	660	660	590	640	710	670	760	850	650	760	790	720
<b>2016</b>	660	650	710	670	800	740	850	790	700	800	790	870
<b>2017</b>	730	600	680	670	730	680	870	770	710	660	660	840
<b>2018</b>	660	590	670	620	770	710	830	790	750	730	770	790

3.3 Blood alcohol content level

This section is an analysis of driver fatalities by the blood alcohol content (BAC) of the killed driver. The legal drink drive limit is 80 milligrammes of alcohol per 100 millilitres of blood in England, Wales and Northern Ireland and is 50 milligrammes of alcohol per 100 millilitres of blood in Scotland. These data are not available for all drink drive casualties, so the numbers are lower than the true number of drink drive casualties.

In 2018, 64 people (61 in England and Wales, 3 in Scotland) were killed in 2018 with alcohol present in their blood but below the limit. These deaths show that drink drive interventions should not overlook those who currently drink under the legal limit either in their targeting or when assessing the impacts of any intervention. Of the 108 drivers who died while over the limit (104 in England and Wales, 4 in Scotland), 69 were over twice the limit (65 in England and Wales, 4 in Scotland). It should be noted that Scotland's drink drive limit is lower than England and Wales.



**Figure 4:** Number of driver and ride deaths by blood alcohol content and country, 1028, note the different BAC limit in Scotland and England and Wales (RRCGB)

Table 2 shows the cumulative percentage of road fatalities aged 16+ over a given blood alcohol level in England and Wales in 2018 (for example, 21% of motorcycle drivers who died

have a blood alcohol level over 9mg/100ml, 10% had a blood alcohol level over 10mg/100ml). These data shows very similar levels of blood alcohol for car drivers and car passengers. This suggests, in agreement with the academic literature on drink driving, that those who are travelling with drink drivers are likely to have drunk similar amounts, perhaps contributing to the decision to drink drive.

Data on the BAC of those involved in drink drive collisions demonstrate that some drivers drink very large amounts of alcohol before driving. More than half of drivers involved in fatal drink drive collisions in 2018 had a BAC of more than twice the limit. The BAC profile of drink drive fatalities shows the need to address the range of levels of drinking before driving.

**Table 2:** Drink drive death by the blood alcohol limit of those involved in the collision, 2018 (RRCGB)

	Cumulative percentage over blood alcohol levels (mg/100ml)					
	Below driving limit		Above driving limit			
	10 or more	51 or more	81 or more	101 or more	151 or more	200 or more
Motorcycle riders	21	10	7	6	3	1
Car drivers	35	23	21	19	15	10
Other vehicle drivers/riders	23	14	11	11	11	3
Passengers	33	20	17	14	10	4
Pedestrians	43	36	36	33	29	22
Pedal cyclists	31	9	9	9	9	3

## CHAPTER 4

# Police enforcement



The Government's approach to reducing drink driving has been one of police enforcement of the legal limit, on the basis that this focuses resources on those drivers who are the most danger to themselves and others.<sup>11</sup>

In Great Britain, police can conduct a preliminary breath test if a driver has committed a moving traffic offence, has been involved in a road traffic collision or if a police officer suspects they have consumed alcohol. If a driver fails a preliminary breath test they will be arrested, and taken to a police station where an evidential breath test will be conducted. This procedure may differ if, for example, a driver has been injured in a collision or is unconscious. Following a positive evidential breath test a driver will be charged and, when fit, released from custody. A driver will then await a court date. In most cases they will be free to continue to drive between being charged and appearing in court: this is frequently several months. If found guilty at court, for a first-time offence a driver will typically be banned from driving for 12 months and fined. A banned driver can reduce their ban by a quarter if they successfully complete a drink drive rehabilitation course (which can cost up to £250). If a driver had committed a previous drink drive offence in the last 10 years, been driving with an alcohol level of greater than 200mg alcohol per 100ml of blood, had refused to provide a sample or refused to allow a sample of blood to be tested they would be placed on the High-Risk Offender Scheme and need to reapply for their licence after a set time period and pass a medical exam.<sup>12</sup> More details on the High Risk Offender Scheme and drink drive rehabilitation course are provided in their respective sections.

In interviews with police officers and those involved in the legal process, concerns were raised about the time taken between preliminary and evidential breath tests and the time between a driver being charged and appearing in court. The longer time that passes between a preliminary breath test and an evidential breath test being conducted the greater the chance of a driver's blood alcohol content falling. This could result in drivers who were driving with a BAC above the legal limit testing below the legal limit at a police station. One solution to this is Mobile Evidential Breath Testing Instruments (MEBTI), which could be used to conduct an evidential breath test at the roadside. There is currently no type approved MEBTI so equipment is not available for police use.

The government has funded a competition aimed at encouraging the development of mobile evidential breath testing instruments, run by PACTS. One company submitted instruments to Dstl for final testing in 2020. PACTS understands that one or more other companies intend to do so in 2021. Home Office type approval would then normally follow within a few months. In which case, MEBTI could be available to police forces in 2022.

Delays between charging and court appearances could lead to drink drivers continuing to drink and drive before they are banned. Police officers and academics interviewed for this project raised concerns about the risk of people being able to continue to drive after being charged with drink driving. The road safety impact of being able to drive after being charged is not clear, and the delays are largely due to long waiting periods in courts more generally, rather than because of issues specific to drink driving.

An additional technological solution which could be considered by the government is alcohol interlocks, which could be fitted to offenders' vehicles. A study of the feasibility of a trial of alcohol interlocks is being conducted by PACTS, funded by the DfT and will report in 2021.<sup>13</sup> More information on alcohol interlocks and their effectiveness is available in 'Interventions: Alcohol Interlocks'.

<sup>11</sup> The Government's Response to the Reports by Sir Peter North CBE QC and the Transport Select Committee on Drink and Drug Driving ([publishing.service.gov.uk](https://publishing.service.gov.uk)) (2011)

<sup>12</sup> <https://www.gov.uk/driving-disqualifications/disqualification-for-drink-driving>

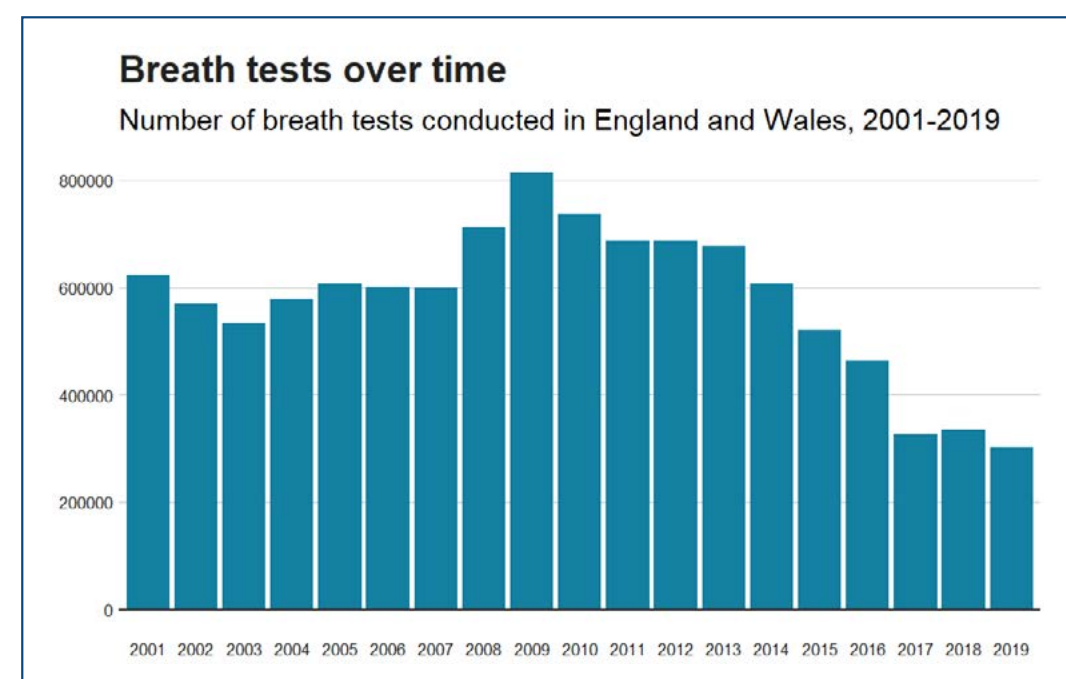
<sup>13</sup> <https://www.pacts.org.uk/2020/05/new-pacts-research-project-alcohol-interlocks/>

The Governments' drink drive strategy requires effective enforcement where high risk drink drivers are identified, breath tested and arrested. However, since 2010, there have been significant cuts to roads policing.<sup>14</sup> This raises the question of whether the police have been given the resources necessary to effectively enforce the drink drive laws in the UK.

Concerns were raised about the impact of roads policing cuts in Her Majesty's Inspectorate of Constabulary Fire and Rescue Services (HMICFRS) inspection of roads policing in England and Wales. HMICFRS highlighted how cuts to roads police numbers meant in one force inspected, shift systems were unable to work effectively and roads policing patrols stopped at 2am, despite officers feeling there was a need to target drink-driving at this time because of a focus on responding to collisions. HMICFRS also found that officers felt they were discouraged from being proactive as this was seen as a distraction from their central role of responding to incidents. HMICFRS were told that **'no one thanks you for being tied up with a drink-drive prisoner for two hours'**. The inspection also found that these cuts had had a negative effective on officers' development, with student officers often completing their two-year probationary period without having experience of basic roads policing activity such as making an arrest for drink driving<sup>15</sup>

## 4.1 Breath test data

**SUMMARY:** The number of breath tests conducted has fallen significantly since 2009. Breath test data indicates that drink driving is more prevalent at weekends, in the evenings and at night.



**Figure 5:** Number of breath tests conducted in England and Wales from 2001 to 2019 (Home Office Police Powers and Procedures)

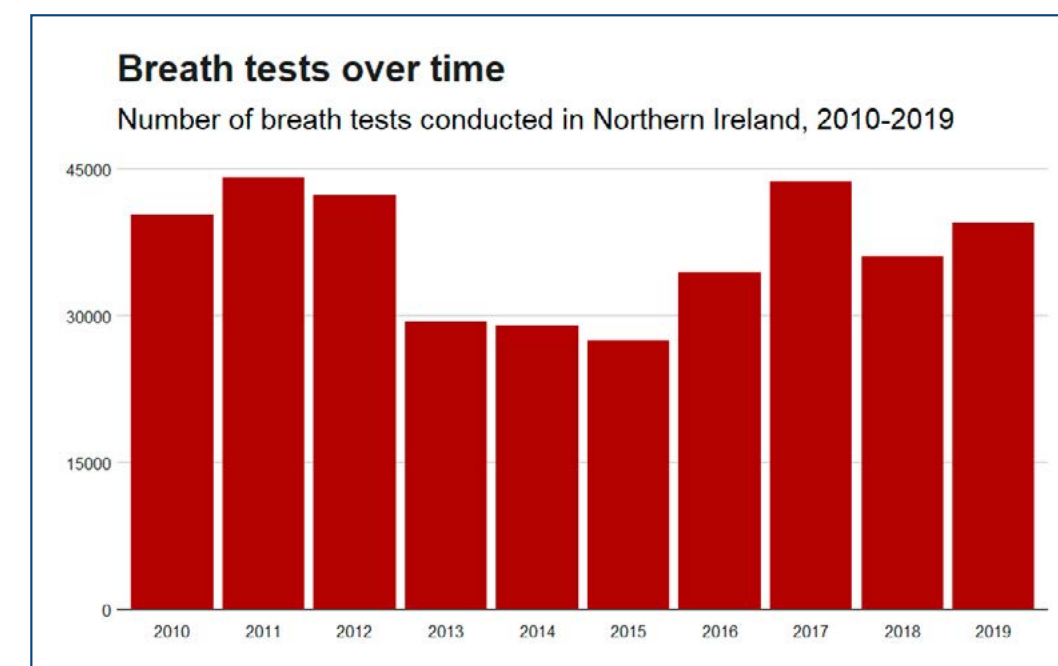
The number of breath tests conducted is commonly used as a proxy for police enforcement of drink driving.<sup>16</sup> The number of roadside screening breath tests undertaken by the police

<sup>14</sup> Norbury, F. (2020). *Roads policing and its contribution to road safety*. PACTS.

<sup>15</sup> HMICFRS. (2020). *Roads Policing: Not optional*. HMICFRS

<sup>16</sup> Norbury, F. (2020). *Roads policing and its contribution to road safety*. PACTS.

has fallen significantly in England and Wales since a peak of 815,290 in 2009 to just 302,281 in 2019. The figure for 2019 is the lowest since at least 2002 when records were first available. 17.8% of breath tests conducted in 2019 were either positive or refused, the highest figure since 2004. The percentage of breath tests being failed or refused has increased steadily year on year since 2013, as the number of tests conducted has fallen steadily. While the number of breath tests is not recorded in Scotland, data from Northern Ireland shows a different picture. The number of breath tests being conducted in Northern Ireland has increased significantly since 2015 (after random breath tests were introduced) before a slight fall in 2018. As in England and Wales, the positive or failed rate in Northern Ireland is higher in years with less breath testing (though the number of failed tests remains lower).



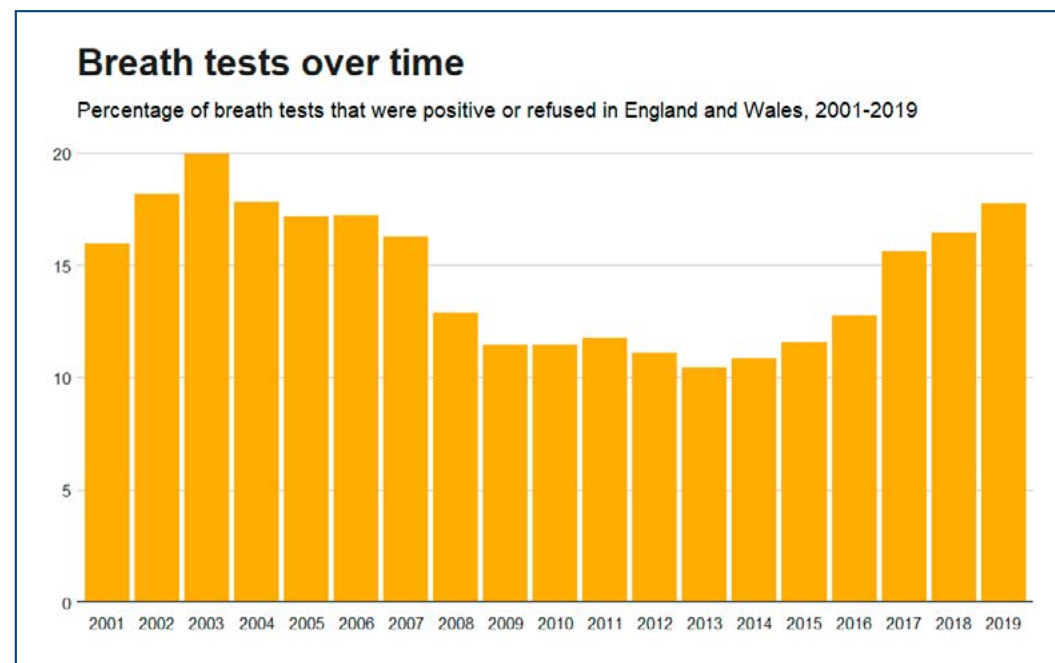
**Figure 6:** Number of breath tests conducted in Northern Ireland from 2010 to 2019 (Police Service of Northern Ireland)

In 2019, the number of breath tests taken in England and Wales in December was significantly higher than the number taken in any other month. This coincides with the typical periods of increased drink drive enforcement around Christmas, where the NRPOII national campaign is generally run. The percentage of breath tests which were positive or refused was significantly lower in December. Northern Ireland has a similar peak in testing numbers in December, coinciding with the lowest positive/refused rate.

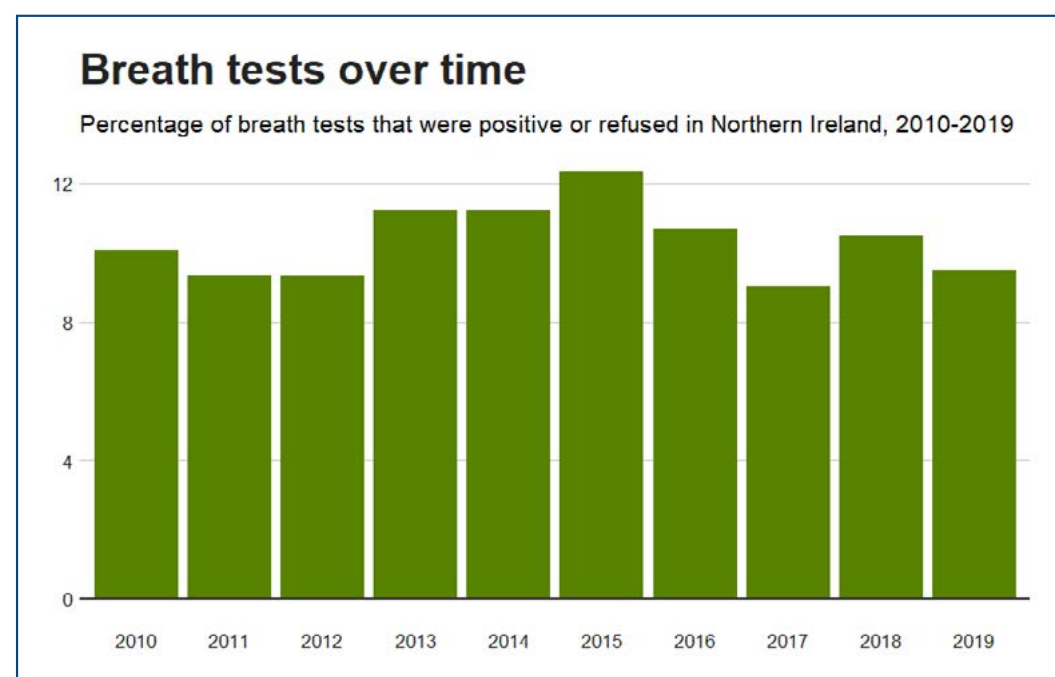
Similarly, the number of drivers and riders being breath tested after a collision in England and Wales has been decreasing since 2007, as has the number who failed a breath test. The percentage of drivers who failed a breath test having been involved in a collision has remained broadly stable at 3-4%. In 2019, 179,572 drivers and riders were breath tested having been involved in an accident (56% of those involved in collisions) 6,279 failed the breath test (3.5% of those tested). In 2017, 78,044 were tested (39% of those involved in collisions) and 3,791 failed the breath test (4.9% of those tested).

The number of failed breath tests is significantly higher in the evening and at night than at other times. The number of failed breath tests in England and Wales is highest on Friday and Saturday nights. There are also comparatively high levels of failed breath tests on Saturday and Sunday afternoon. As well as higher numbers of failed breath tests, a higher percentage of breath tests are positive/refused at night and in the evening than during the rest of the day.



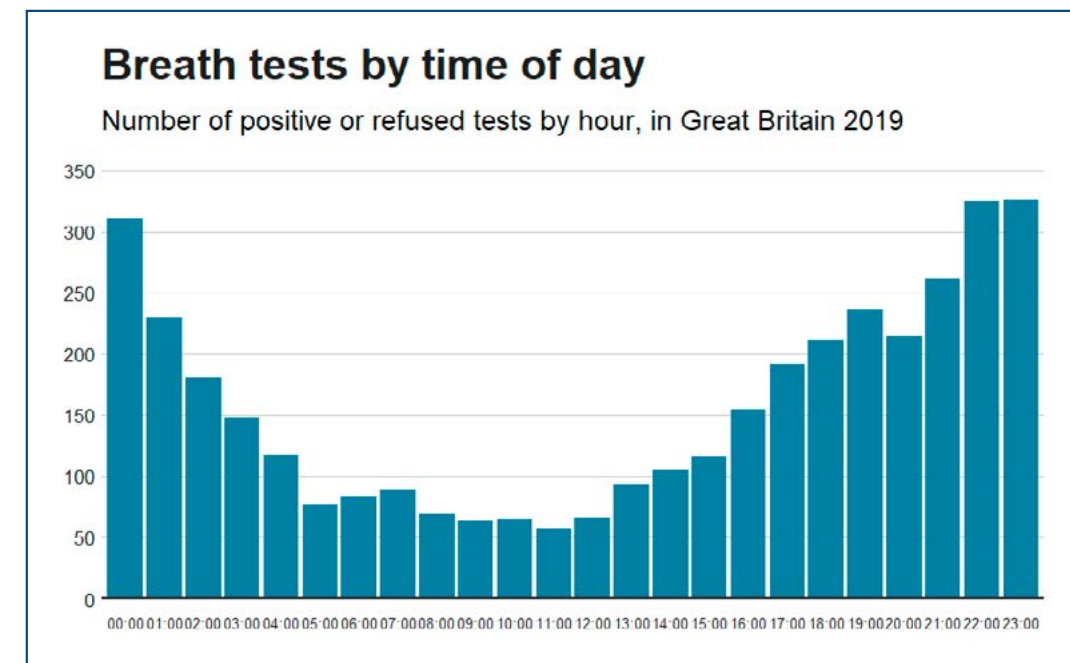


**Figure 7:** Percentage of breath tests that were positive or refused in England and Wales from 2001 to 2019 (Home Office Police Powers and Procedures)



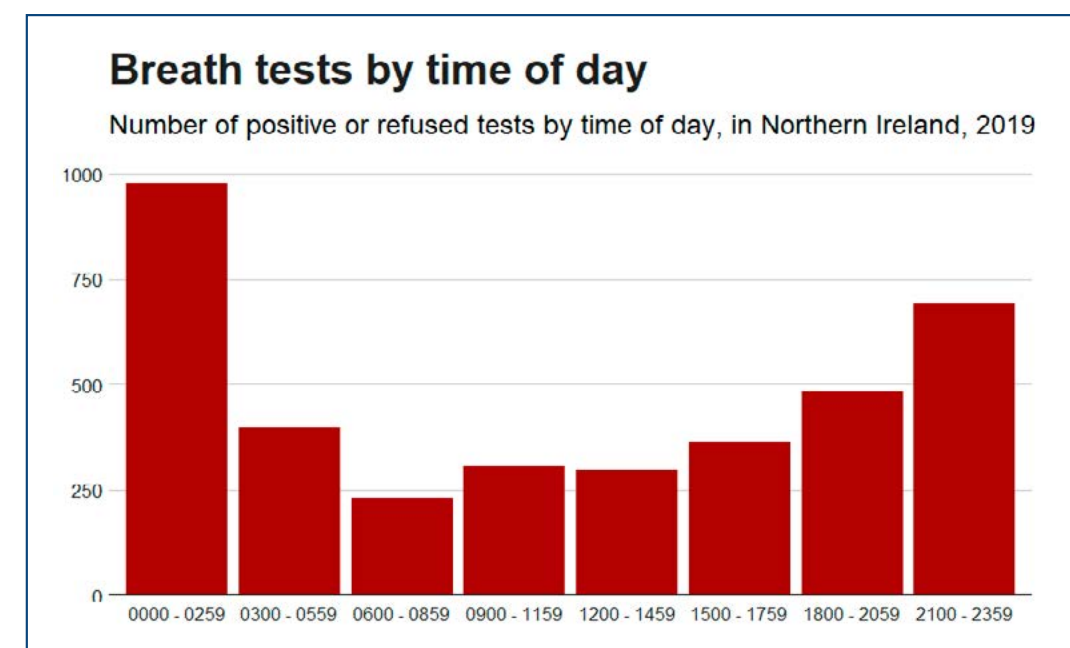
**Figure 8:** Percentage of breath tests that were positive or refused in Northern Ireland from 2001 to 2019 (Police Service of Northern Ireland)

This likely reflects both higher levels of drinking and subsequent higher levels of drink drive enforcement during these time periods. Despite some support for concerns about 'morning after' drink driving in the number of positive or refused tests between 6am and 8am, the breath test data suggests that drink driving largely takes place in the evening and at night.



**Figure 9:** Number of positive or refused tests conducted by hour in England and Wales, 2019 (Home Office Police Powers and Procedures)

Data from Northern Ireland shows a similar story, with high levels of testing and high positive/failed to provide rates in the evening and overnight. Northern Ireland also has a comparatively high number of breath tests between 09:00 and 11:59 though with the lowest positive/failed to provide rate.



**Figure 10:** Number of positive or refused tests conducted by time of data in Northern Ireland, 2019 (Police Service of Northern Ireland)

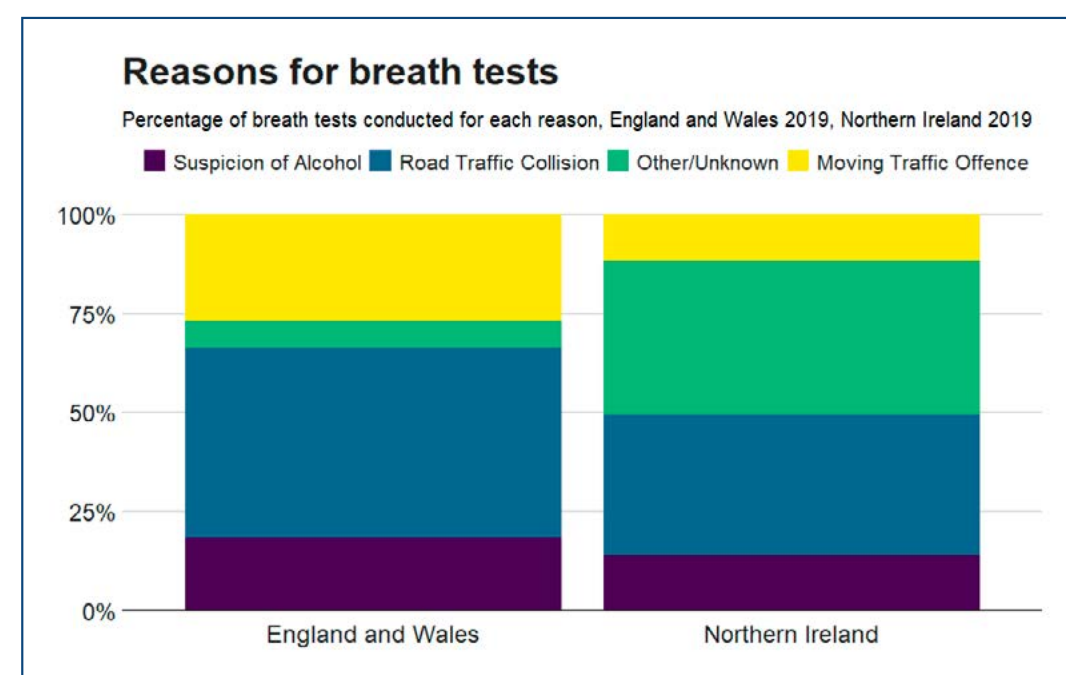
The Home Office categorises the reasons for a driver being tested as 'Moving Traffic Offence', 'Road Traffic Collision', 'Suspicion of Alcohol' and 'Other/Unknown.' Figure 11 shows that in Northern Ireland, where random breath testing is allowed, 'Other' makes up a significantly higher proportion of breath tests than in England and Wales. The positive test percentage for



each reason varies. Just 9% of those breath tested due to a road traffic collision test positive, this compares to 22% of those breath tested because of a suspicion of alcohol.

The Home Office does not publish data on the level of alcohol found by each test, only whether the test was over or under the drink drive limit. These data would provide useful insights into the BAC of all drink drivers, whether or not they were involved in collisions. The data would also provide useful insights into enforcement and the appropriateness of the current drink drive limit, including whether those who do not fail breath tests had no alcohol in their system or were just under the limit.

The number of offenders found guilty of drink or drug driving offences ('other offences relating to drink- or drug-driving' are grouped together in Home Office data) has fallen significantly since 2008 (from 73,155 to 51,992) though has been broadly stable at around 50,000 per year since 2010. In 2018, 971 offenders received a custodial sentence, 38,415 were fined, 45,016 disqualified and a further 1706 had an endorsement placed on their licence but were not disqualified. The average fine for drink driving



**Figure 11:** The percentage of breath tests that were conducted for each reason in England and Wales and Northern Ireland, 2019 (Home Office Police Powers and Procedures, Police Service of Northern Ireland)

Overall, data on breath tests and convictions demonstrates a significant fall in the enforcement of drink driving law over the last ten years, in line with the fall in other traffic offences. This reduction in enforcement coincides with the stagnation in drink drive casualty figures.

## 4.2 Data on reoffending

Data provided to PACTS by the DVLA shows that since 2010, 32,025 people committed a drink drive offence with a previous drink/drug drive offence on their record. This means that 7% of those who committed a drink driving offence were reoffending. 107,913 drink drive offences were committed by someone with a previous drink/drug driving offence on their record. This means that 17% of drink drive offences were committed by someone who was reoffending. Eight people were convicted of causing death by careless driving when unfit

through drink/with alcohol level above the limit with a previous drink/drug offence on their record. One driver was charged with driving or attempting to drive with alcohol level above the limit with 8 previous drink/drug drive offences on their record.<sup>17</sup> One person committed the offence 'driving or attempting to drive with drug level above the specified limit' when they had 18 previous drink or drug driving offences.

Those who reoffend are likely to do so soon after their earlier offence. 6,164 people committed a subsequent drink drive offence in the year after their first offence (note, data on reoffending were not supplied to PACTS in even time periods). 9,733 committed an offence one or two years after their first offence, 8,550 reoffended three or four years after, 5,482 five or six years after, 2,954 seven or eight years after and 904 nine or ten years after.<sup>18</sup> These data do not include those who drink drove but were not caught, this figure is likely to be substantially higher..

This dataset only shows offences back to 2010 e.g. someone who committed a drink drive offence in 2011 with a previous offence in 2009 would not be counted as reoffending. This is because of the data supplied to PACTS by DVLA from its Impala database. It is therefore likely that these data on reoffending are an underestimate.

An unknown piece of data on the effectiveness of the legal system is how many people drive having been disqualified. 8,445 people were found guilty of driving while disqualified in 2019.<sup>19</sup> However, the data do not show why these drivers were disqualified. TO be included in this dataset a disqualified driver would also have had to be caught by the police. As such, it is likely to be a significant underestimate. Police officers, those involved in the legal system and academics interviewed for this report expressed concerns over how many people likely drive while disqualified and how unlikely they are to be caught doing so, in part because of significant cuts to roads policing.

Data on reoffending and the number of breath tests conducted suggests there needs to be a reassessment of the government's approach to drink driving, both by increasing the resources available to the police to enforce drink driving laws and reviewing programmes aimed at reducing drink driving such as Drink Drive Rehabilitation Courses and the High-Risk Offender Scheme. This is discussed in more detail in 'Potential interventions'.

<sup>17</sup> Data supplied to PACTS by the DVLA

<sup>18</sup> Data supplied to PACTS by the DVLA

<sup>19</sup> MoJ (2020). Criminal Justice Statistics Quarterly: Motoring Tool. MoJ

## CHAPTER 5

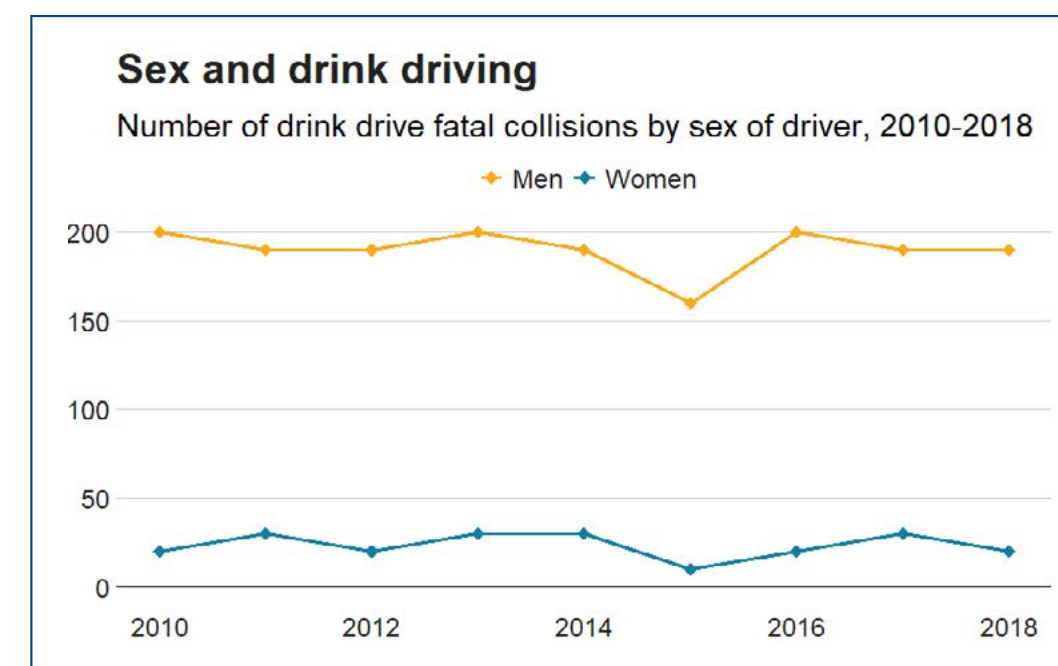
# Profile of drink drivers



Unless otherwise noted, casualty data in this report are from 'Reported Road Casualties in Great Britain: estimates involving illegal alcohol levels'. Figures in this report are estimates based on Stats19 forms completed by police plus toxicology data from coroners and procurators fiscal. Figures are rounded to the nearest ten because of uncertainty regarding estimates. The figures are National Statistics and more information on the methodology used to produce them can be found in 'Reported road casualties in Great Britain: final estimates involving illegal alcohol levels: 2018'.

## 5.1 Sex

**SUMMARY:** Men are significantly more likely to drink drive than women. Male and female drink drivers have a different profile: for example, women who drink drive tend to be older.



**Figure 12:** Number of drink drive collisions by the sex of the driver who was over the limit from 2010 to 2018 (RRCGB)

One of the clearest demographic features in drink driving is sex. Men are significantly more likely to become involved and die or be seriously injured in a drink drive related collision. In 2018 there were 20 fatal drink drive collisions and 180 serious injuries collisions involving an impaired female driver.<sup>20</sup> By contrast there were 190 fatal drink drive collisions and a further 930 serious injury collisions involving an impaired male driver. 20 women were killed in drink drive collisions and a further 210 seriously injured. 220 men were killed in drink drive collisions and a further 1,150 seriously injured. These findings are reinforced by data from the Crime Survey for England and Wales in 2019/20 where 6.5% of male drivers reported driving whilst thinking they were over the legal alcohol limit at least once in the last year compared to 3.3% of female drivers. These statistics corroborate evidence from the literature that men are more

<sup>20</sup> Unless otherwise noted, data is from DfT "Reported Road Casualties in Great Britain, final estimates involving illegal alcohol levels", various years.

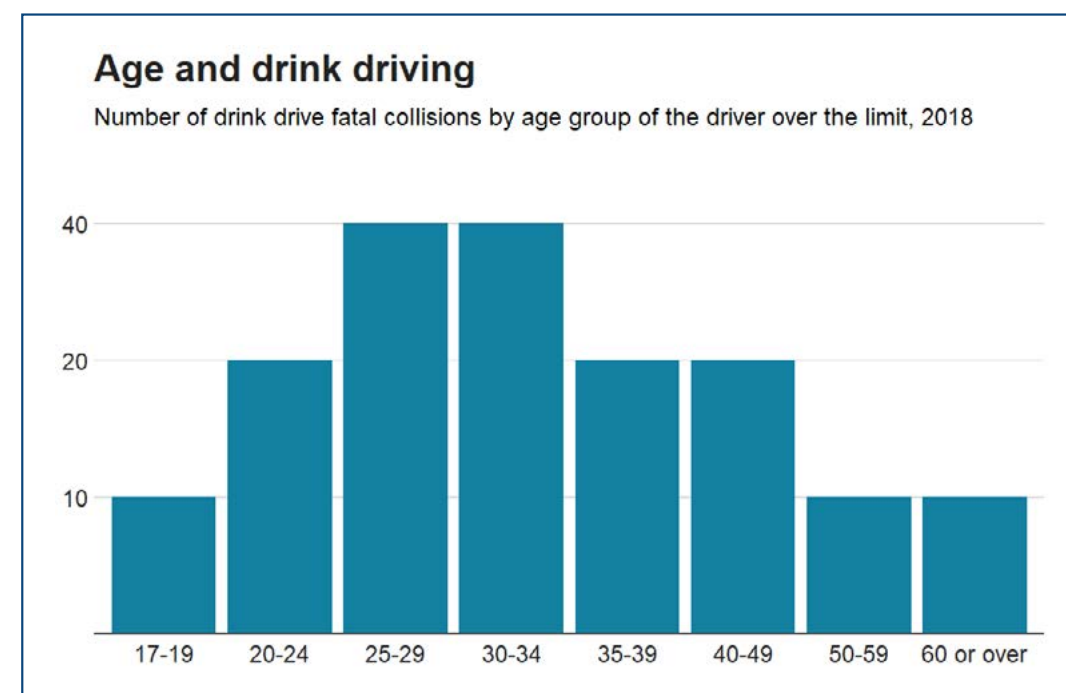


likely to drive after drinking and drink drive more often than women.<sup>21</sup> Men are also more likely than women to report that they would drive when they thought they were over the limit.<sup>22</sup>

While women are less likely to drink drive than men, it is important to note that the profile of drink drivers is different amongst men and women and data should be sex disaggregated where possible. For example, there is a different age profile, with less reduction in drink driving with age amongst women than men. Women may also be more likely to drink at home before drink driving and there are some different reasons for drink driving.<sup>23</sup> Areas where there is evidence of different profiles between sexes are discussed in more detail here in each relevant section (e.g. different age profiles are discussed in more detail in 'Age'). Finally, it should be noted that men also drive more, have more road collisions of all types, and commit more crimes than women, so this difference is not unique to drink driving.

## 5.2 Age

**SUMMARY:** Young people are more likely to drink drive and are more likely to be involved in a drink drive collision than older people, though this difference is less pronounced in recent years.



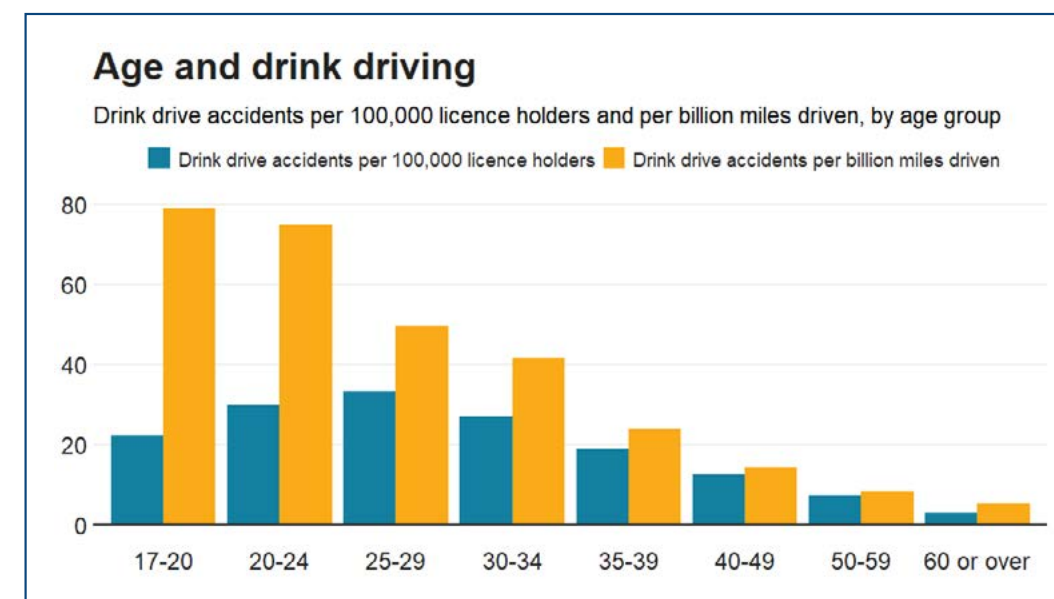
**Figure 13:** Number of drink drive fatal collisions by the age group of the driver who was over the limit, 2018 (RRCGB)

Based purely on the number of car driver drink drive fatalities, younger people, in particularly those aged 25-34, are most at risk, with 40 deaths in each 5 year group. When accounting for the number of licences held per age group the higher involvement of young people is also clear, as illustrated in Figure 14. Those under 20 have the highest rate of drink drive collisions per billion miles driven and this decreases with age. Those aged 25-29 have the highest rate of drink drive accidents per driving licence held, a rate which also decreases for older age groups.

<sup>21</sup> Hopkin, J., Sykes, W., Groom, C., and Kelly, J. (2010). *A Qualitative Study of Drinking and Driving: Report on the Literature Review*. Road Safety Research Report No. 113, Department for Transport.

<sup>22</sup> Road Safety Observatory. (Undated). *Drink Driving*. Road Safety Observatory.

<sup>23</sup> Beuret, K., Corbett, C., and Ward, H. (2014). *Drinking among British Women and its impact on their pedestrian and driving activities*. Social Research Associates.



**Figure 14:** Number of drink drive accident per 100,000 licence holders and per billion miles driven, by age group, 2018 (RRCGB)

The evidence from surveys and collision data on age broadly supports that in the wider literature on drink driving. The literature suggests that young people are more likely to be involved in or seriously injured in drink drive collisions.<sup>24</sup> However, it also suggests that actual drink driving may be higher amongst older age groups, particularly amongst the middle aged.<sup>25</sup> There is little evidence of this in official UK casualty statistics, though it is possible that older drink drivers would be less likely to be involved in collisions than younger drink drivers. The RAC Report on Motoring does suggest this may be the case with 25-44 year olds more likely to report having driven when they thought they were over the limit than 17-24 year olds or 45+. The Crime Survey for England and Wales found that in 2019/20 the proportion of drivers admitting having driven over the legal alcohol limit at least once in the previous 12 month was highest amongst 20-29 year olds (6.7%) and lowest amongst those aged 50 and over (4.3%), the figure was 5.6% for those aged 16-19. This suggests that definitions of 'young person' may cause this disparity. Beuret, Corbett and Ward (2014) identify that for women, the age profile of drink driving is different with drink driving being more frequent amongst women aged 40-49, and generally there is little or no reduction in drink driving with age. This finding has been overlooked by much of the existing research into drink driving which has been sex blind or focused predominantly on men (due to the comparatively higher level of drink driving amongst men).<sup>26</sup> Overall, the evidence suggests that the very youngest drivers, in particular those under the age of 20 are not the most likely to drink drive. However, they do have more accidents than any other age group per billion miles driven. This may be due to inexperience or attitude towards risk. The raw number of collisions, collisions per licence holder and survey data on drink driving suggest that drink driving is most prevalent amongst people in their 20s and 30s and then reduces with age.

While it is clear that young people are at higher risk of dying in or being involved in drink drive related collisions, the extent to which this is the case has reduced in recent years. The

<sup>24</sup> Schulze, H., Schumacher, M., Urmeew, R., Auerbach, K. (2012). *Final Report: Work performed, main results and recommendations*. DRUID.

<sup>25</sup> Hopkin, J., Sykes, W., Groom, C., and Kelly, J. (2010). *A Qualitative Study of Drinking and Driving: Report on the Literature Review*. Road Safety Research Report No. 113, Department for Transport.

<sup>26</sup> Beuret, K., Corbett, C., and Ward, H. (2014). *Drinking among British Women and its impact on their pedestrian and driving activities*. Social Research Associates.

number of drink drive related accidents per 100,000 licence holders has fallen by 22% for those under 20 and 30% for 20-24 year olds since 2010-2014. The number of accidents per billion miles driven has also fallen for these age groups (by 34% and 27% compared to the 2010-2014 average).

By contrast, the number of accidents per licence holder and mile driven has increased or remained broadly stable for all other age groups. The number of 17-24 year olds killed or seriously injured in collisions involving drink driving reinforces these findings. In 2010, 250 young drivers were killed or seriously injured when over the limit. This has fallen to 160 in 2018. Moreover, the number of other people killed or seriously injured in a collision involving a 17-24 year old driver who was over the legal limit fell from 260 in 2010 to 190 in 2018. This suggests that while young people are still at a higher risk of being involved in drink drive collisions, the level of risk is reducing.

Data from the Crime Survey for England and Wales also suggests that drink driving is higher amongst young people. In 2019/20, 6.7% of 20-24 and 25-29 year old drivers reported driving whilst thinking they were over the legal alcohol limit compared to 5.7% across all age groups. Ages 30-39 and were also above the average, with 6.1% admitting to drink driving at least once, while those aged over 40 were less likely than average to admit to the behaviour (4.2% for those aged 40-49 and 4.3% for those aged 50 and over).

Interestingly, in 2019/20, just 5.6% of 16-19 year old drivers reported driving whilst thinking they were over the legal alcohol limit at least once in the last year, lower than all age groups under 40. As recently as 2015/16, 16-19 year olds had the highest reported drink driving of any age group (9.9% compared to 7.6% across all age groups that year) and in 2009/10, 12.2% of this age group reported drink driving (compared to 7.3% across all adults). This reinforces the evidence from road safety data that there has been a reduction in drink driving amongst younger drivers.

### 5.3 Level of alcohol consumption

**SUMMARY: Drink drivers are more likely to have alcohol issues, drink more and drink more when they do drink than the rest of the population.**

Multiple studies have found that those who drink more regularly are more likely to drink drive.<sup>27</sup> Similarly, those who drink more heavily when they do drink and particularly those who binge drink are more likely to drink drive.<sup>28</sup> It has been suggested that certain patterns of drinking during a drinking session - particularly pre-drinking - may be associated with higher levels of drink driving, however the evidence of this is less clear.<sup>29</sup>

The majority of drink drivers do not have alcohol issues. However, the literature suggests that those who drink drive tend to drink more, and more often, and are at higher risk of alcohol abuse.<sup>30</sup> Those who drink drive, particularly repeat offenders, can have higher rates of alcohol

problems than the general population. One study from the US found that 97.5% of repeat drink drive offenders had a diagnosis of an alcohol use disorder in their lifetime,<sup>31</sup> while other studies have found that drink drivers are at higher risk of alcohol abuse and are more prone to health problems linked with alcohol use.<sup>32</sup> Similarly, studies have found that drink drivers have significantly lowered platelet monoamine oxidase activity, which is strongly associated with alcohol problems.<sup>33</sup> Furthermore, there is evidence that drink drivers who are likely to offend several times tend to have a high degree of alcohol dependence.<sup>34</sup> A qualitative study of repeat drink drivers in the USA has found that repeat offenders had substance misuse problems which contributed to their drink driving.<sup>35</sup> A study of drink driving across Europe also noted that many repeat offenders had underlying health problems relating to alcohol misuse or dependency.<sup>36</sup>

A study of alcohol problems amongst Swedish drivers suspected of drink driving using scores from the Alcohol Use Disorders Identification Test (AUDIT) – a screening tool for alcohol use disorders -found that alcohol problems were four times more common amongst both men and women suspected of drink driving than amongst a control group of drivers. 58% of the men and 55% of the women suspected of drink driving had hazardous or harmful levels of alcohol use. Amongst those stopped at general traffic controls, 55% of men and 44% of women suspected of drink driving had alcohol problems compared to 15% of male and 10% of female control drivers. The comparative rate of severe alcohol problems is even more striking, particularly amongst men. 23.3% of men suspected of drink driving had a severe alcohol problem compared to 1.2% of men in the control groups. The equivalent percentages for women were 8.8% and 1.1% respectively. There were higher AUDIT scores amongst drivers suspected of drink driving who had been tested after traffic accidents, unlawful driving and after public reports of dangerous driving compared to those who had been stopped at general controls or for speeding. Interestingly, severe alcohol problems were most common amongst those suspected of drink driving during the afternoon (between 12:00 and 18:00). Female middle aged drivers also had very high AUDIT scores (indicating harmful levels of alcohol use and alcohol problems) compared with middle aged in the control population.<sup>37</sup>

<sup>30</sup> Lenton, S., Fetherston, J., Carcarelli, R. (2010). Recidivist drink drivers' self-reported reasons for driving whilst unlicensed—A qualitative analysis. *Accident Analysis and Prevention*, 42(1), 637–644.

Impinen, A. et al. (2011). 'The Association between Social Determinants and Drunken Driving: A 15-Year Register-based Study of 81,125 Suspects'. *Alcohol and Alcoholism*, 46(6), 721-728.

Campos, V. R. et al. (2013). The effect of the new traffic law on drinking and driving in São Paulo, Brazil. *Accident Analysis & Prevention*, 50; 622-627

<sup>31</sup> Shaffer, H. J., Nelson, S. E., LaPlante, D. A., LaBrie, R. A., Albanese, M., & Caro, G. (2007). The epidemiology of psychiatric disorders among repeat DUI offenders accepting a treatment-sentencing option. *Journal of Consulting and Clinical Psychology*, 75(5), 795-804

<sup>32</sup> Impinen, A. et al. (2011). 'The Association between Social Determinants and Drunken Driving: A 15-Year Register-based Study of 81,125 Suspects'. *Alcohol and Alcoholism*, 46(6), 721-728.

Karjalainen, K., Lintonen, T., Joukamaa, M., and Lillsunde, P. (2013). Mental Disorders Associated with Driving under the Influence of Alcohol and/or Drugs: A Register-Based Study. *European Addiction Research*, 19, 113-120.

<sup>33</sup> Eensoo, D., Paaver, M., Harro, M., and Harro, J. (2005). Predicting drunk driving: contribution of alcohol use and related problems, traffic behaviour, personality and platelet monoamine oxidase (MAO) activity. *Alcohol and Alcoholism*, 40(2), 140-146.

Tokko, T., Eensoo, D., Vaht, M., Lesch, K., Reif, A., and Harro, J. (2019). Relapse of drunk driving and association with traffic accidents, alcohol-related problems and biomarkers of impulsivity. *Acta Neuropsychiatrica*, 31(2), 84-92.

<sup>34</sup> Goldenbeld, C., Blom, M. & Houwing, S. (2016). *Zware alcoholovertreders in het verkeer. Omvang van het probleem en kenmerken van de overtredders*. R-2016-12. SWOV, Den Haag.

Eensoo, D., Paaver, M., Harro, M., and Harro, J. (2005). Predicting drunk driving: contribution of alcohol use and related problems, traffic behaviour, personality and platelet monoamine oxidase (MAO) activity. *Alcohol and Alcoholism*, 40(2), 140-146.

<sup>35</sup> Oshri, A., Carlson, M., Bord, S., and Zeichner, A. (2017). Alcohol-Impaired Driving: The Influence of Adverse Rearing Environments, Alcohol, Cannabis Use, and the Moderating Role of Anxiety. *Substance Use and Misuse*, 52(4): 507-517.

<sup>36</sup> Calinescu, T., and Admintaie, D. (2018). *Progress in reducing drink driving in Europe*. ETSC.

<sup>37</sup> Bergman, H., Hubicka, B., and Laurell, H. (2002). *Alcohol Problems among Swedish Rivers Suspected of DUI*. [http://www.icadtsinternational.com/files/documents/2002\\_185.pdf](http://www.icadtsinternational.com/files/documents/2002_185.pdf)



In 2015, Addaction, a British mental health and addiction charity, conducted a survey of attitudes and drinking amongst over 50s in the UK. The survey found that 18% of over 50s had driven within an hour of drinking in the last twelve months (21% in England, 6% in Scotland, 19% in Wales and 14% in Northern Ireland) and 4% had driven when they thought they might have been over the legal alcohol limit in the last 12 months (4% England, 5% Scotland, 4% Wales, 6% Northern Ireland) – just 1% lower than the equivalent Crime Survey for England and Wales figure. The study also separated participants by AUDIT score. 16% of those identified as being at lower risk by AUDIT had driven within an hour of drinking in the past twelve months, compared to 27% of those at increasing risk and 35% at higher risk/possible dependence. Of those at lower risk, 3% had driven when they thought they might have been over the legal alcohol limit in the past 12 months compared to 11% of those at increasing risk and 30% at higher risk/possible dependence.<sup>38</sup> While these findings are only for over 50s, they add further evidence from the UK to the suggestion that drink driving is associated with greater alcohol consumption and possible alcohol dependence.

While the evidence is clear on the relationship between drinking more and drink driving at an individual level, the evidence is more mixed at a national level, with no consensus on the presence of a relationship between change in the total population level of alcohol consumption, and change in the incidence on drink driving.<sup>39</sup>

The 17 people who frequently drank and were interviewed for this project reported that they drove on a regular basis, sometimes daily. They would drive at all times of the day, though late at night or early in the morning were most common. Amongst those who were alcohol dependent, one of the most common reasons for driving was to buy or find more alcohol. A small number of those interviewed were also not aware of drink driving during the actual event, and only became aware after, either from seeing the evidence in the form of empty alcohol bottles or being caught by the police. Many of those who had a past alcohol problem were driving in circumstance when there was little self-control. This evidence suggests that drink driving behaviour may be significantly different for those with alcohol dependency

Not all drink drivers have alcohol issues or regularly consume large amount of alcohol. However, those who have alcohol issues, drink more regularly or drink larger amounts when they do consume alcohol, are more likely to drink drive.

## 5.4 Mental health and psychological factors

**SUMMARY: Drink drivers are more likely to be more impulsive and have mental health issues than the general population.**

Evidence from the UK on psychological and personality factors associated with drink driving is limited. As such, the findings should be treated with caution. However, they may be able to provide some insight into the profile of drink drivers. People with high task self-efficacy (one's belief in one's ability to accomplish a task) and better planning skills are less likely to drink drive.<sup>40</sup> Indeed, some studies have found that those who repeatedly drink drive have better knowledge of drink drive laws but are poorer planners, are more impulsive and have higher temporal discounting rates (i.e. they value things in the future less than those

in the present).<sup>41</sup> Other studies have also found that drink drivers have higher impulsivity, in particular dysfunctional impulsivity.<sup>42</sup> Drink driving behaviour has also been found to be associated with biological markers of impulsivity (the study uses gene polymorphisms and platelet monoamine oxidase activity which have been shown to be linked with higher impulsivity) and excessive risk taking.<sup>43</sup> Some evidence indicates that drink driving is also associated with other impulsive driving behaviours including seat belt non-use, speeding and not paying for parking.<sup>44</sup> This suggests that poor knowledge of the drink drive limit is not a cause of drink driving and that information campaigns should therefore focus on enabling better planning and raising awareness and desirability of alternatives to drink driving.

Drink drivers may also have higher levels of stress than other drivers, with a study of fatal crash involved drivers in the US finding that 23% of drink drivers were known to be experiencing psychological stress at the time of the crash. It has also been suggested that 'serious alcohol offenders' have a high degree of alcohol dependence and 'psychiatric side problems'.<sup>45</sup> Similarly, a Swedish study found that drink drivers were likely to have more problems with family and social relations, and were more likely to have medical problems, including depression and anxiety. Having family members or spouses with alcohol problems has also been found to be associated with drink driving and recidivism risk. Female drink drivers were more likely than male drink drivers to have these problems.<sup>46</sup> The Swedish study found that 20% of drink drivers had problems with controlling violent behaviour, 25% had suicidal thoughts, 12% had attempted suicide and 27% had been prescribed medication for emotional problems. Moreover, 61% of female drink drivers and 42% of male drink drivers reported earlier depression, the corresponding percentage for anxiety was 61% and 42% and for emotional abuse earlier in life 55% and 29%. Drink drivers with problems with their legal status, family and social relations were more likely to reoffend than those without those problems.<sup>47</sup> A study of drink drivers in Finland found that childhood and adolescence-onset disorders were a strong predictor of drink driving, as were 'other mental disorders', such as depression, bipolar disorder and post-traumatic stress disorder. The risk of drink driving was highest soon after hospital admission with a psychiatric diagnosis and decreased over time. This study supports the suggestion that female drink drivers are more likely to have psychological issues than male drink drivers.<sup>48</sup> This is also supported by a study of repeat drink drive offenders in the US, which found that drink drive reoffenders had high levels of

<sup>38</sup> Holley-Moore, G., and Beach, B. (2016). *Drink Wise, Age Well: Alcohol Use and the Over 50s in the UK*. ILC UK

<sup>39</sup> Norstrom, T., and Rossow, I. (2013). 'Population drinking and drink driving in Norway and Sweden: an analysis of historical data 1957-1989. *Addiction*, 108(6). <https://doi.org/10.1111/add.12126>  
Gjerde, H., Christophersen, A., Normann, P., and Morland, J. (2013). Increased population drinking is not always associated with increased number of drink driving convictions. *Addiction*, 108(12): <https://doi.org/10.1111/add.12342>

<sup>40</sup> Wilson, H., Sheehan, M., Palk, G., and Watson, A. (2016). Self-Efficacy, Planning, and Drink Driving: Applying the Health Action Process Approach. *Health Psychol.*

<sup>41</sup> National Academies of Sciences, Engineering, and Medicine. (2018). *Getting to zero alcohol-impaired driving fatalities: A comprehensive approach to a persistent problem*. Washington, DC: The National Academies Press.

<sup>42</sup> Eensoo, D., Paaver, M., Harro, M., and Harro, J. (2005). Predicting drunk driving: contribution of alcohol use and related problems, traffic behaviour, personality and platelet monoamine oxidase (MAO) activity. *Alcohol and Alcoholism*, 40(2), 140-146.

<sup>43</sup> Tokko, T., Eensoo, D., Vaht, M., Lesch, K., Reif, A., and Harro, J. (2019). Relapse of drunk driving and association with traffic accidents, alcohol-related problems and biomarkers of impulsivity. *Acta Neuropsychiatrica*, 31(2), 84-92.

<sup>44</sup> Eensoo, D., Paaver, M., Harro, M., and Harro, J. (2005). Predicting drunk driving: contribution of alcohol use and related problems, traffic behaviour, personality and platelet monoamine oxidase (MAO) activity. *Alcohol and Alcoholism*, 40(2), 140-146.

<sup>45</sup> Goldenbeld, C., Blom, M. & Houwing, S. (2016). *Zware alcoholovertreders in het verkeer. Omvang van het probleem en kenmerken van de overtredders*. R-2016-12. SWOV, Den Haag.

<sup>46</sup> Lapham, S., Skipper, J., Hunt, W., and Chang, I. (2000). Do Risk Factors for Re-Arrest Differ for Female -and Male Drunk-Driving Offenders? *Alcoholism: Clinical and Experimental Research*, 24(11), 1647-1655

<sup>47</sup> Hubicka, B., Laurell, H., and Bergman, H. (2010). Psychosocial characteristics of drunk drivers assessed by the Addiction Severity Index, prediction of relapse. *Scandinavian Journal of Public Health*, 38(1), 71-77

<sup>48</sup> Karjalainen, K., Lintonen, T., Joukamaa, M., and Lillsunde, P. (2013). Mental Disorders Associated with Driving under the Influence of Alcohol and/or Drugs: A Register-Based Study. *European Addiction Research*, 19, 113-120.  
McMurrin, M., Riesma, R., Manning, N., Misso, K., and Kleijnen, J. (2011). Interventions for alcohol-related offending by women: A systematic review. *Clinical Psychology Review*, 31(6), 909-922.

psychiatric disorders, such as substance abuse/dependence and pathological gambling, and that women tended to have more extensive histories of psychiatric morbidity than men.<sup>49</sup>

Three drink drivers who were interviewed for this report stated that they did not drink regularly but had bouts of heavy drinking triggered by a crisis or other event brought on by a recent or past traumatic event. All three participants were later diagnosed with a post-traumatic condition. While not a representative sample of drink drivers, of the 18 drink drivers interviewed for this project who reported an alcohol problem, 12 also reported a mental health problem.

The evidence suggests that drink drivers are more likely to have mental health problems than the general population. In this context it is possible that alcohol is being used by some to self-medicate. Categorising all mental health issues along with neurodiversity, developmental conditions and personality factors is not particularly useful because of the diversity and comorbidity of these conditions. Nevertheless, it highlights the need for interventions to be psychologically informed and reiterates the fact that drink drivers may be vulnerable and have complex needs.

During the coronavirus pandemic the number of people with mental health issues, such as anxiety, has increased.<sup>50</sup> This increase is concerning, particularly as it coincides with more people choosing to drive rather than use public transport and increases in harmful alcohol consumption.<sup>51</sup> This trend should be monitored and its impact on drink driving assessed moving forward.

## 5.5 Social network

**SUMMARY: More research is needed in this area, but the evidence available suggests that exposure to other's drink drive increases an individual's propensity to drink drive**

The social network and social influences on individuals can also affect their propensity to drink drive. Exposure to others' drink driving behaviour, particularly during adolescence is associated with an increased likelihood of drink driving. Similarly, a belief that friends drink drive is associated with an increased likelihood of drink driving. More broadly, various studies have found parental alcohol use to be a predictor of drink driving.<sup>52</sup> A small number of those interviewed for this project indicated that drink driving was normal within their family, social circle or area.

Other social characteristics have also been found to be associated with drink driving. These include: sensation and fun seeking; impulsivity; and aggressiveness.<sup>53</sup> However, there is a weaker body of evidence for these findings, they have often only been found by one study and are not UK based. More research is needed to fully understand the impact of social networks and characteristics on drink driving, though there is evidence that exposure to others' drink driving increases an individual's likelihood of drink driving.

<sup>49</sup> LaPlante, S., Nelson, S., Odegaard, S., LaBrie, R., and Shaffer, H. (2008). Substance and Psychiatric Disorders Among Men and Women Repeat Driving Under the Influence Offenders Who Accept a Treatment-Sentencing Option. *Journal of Studies on Alcohol and Drugs*, 69(2), 209-2017.

<sup>50</sup> Mental Health Foundation. (2020). Coronavirus: Mental Health in the Pandemic. Mental Health Foundation.

<sup>51</sup> Sallie, S. et al. (2020). Assessing international alcohol consumption patterns during isolation from the COVID-19 pandemic using an online survey: highlighting negative emotionality mechanisms. *BMJ Open*, 10(1).

<sup>52</sup> Evans-Whipp, T., et al. (2013). Adolescent Exposure to Drink Driving as a Predictor of Young Adults' Drink Driving. *Accident Analysis and Prevention*, 51(1), 185-191.

<sup>53</sup> Watling, H., et al. (2018). The influence of social factors and personality constructs on drink driving among young licenced drivers. *Transportation Research Part F: Traffic Psychology and Behaviour*, 52(1), 210-221

Evans-Whipp, T., et al. (2013). Adolescent Exposure to Drink Driving as a Predictor of Young Adults' Drink Driving. *Accident Analysis and Prevention*, 51(1), 185-191.

## 5.6 Employment and social background

**SUMMARY: In the UK, those from higher social groups are more likely to drink drive which contrasts with evidence from other countries.**

The evidence suggests that driving after drinking (though not necessarily being over the drink drive limit) in the UK is most prevalent amongst the social group AB, those in 'higher & intermediate managerial, administrative, professional occupations' and lowest amongst those in social grade DE, those in 'Semi-skilled & unskilled manual occupations, unemployment and lowest grade occupations.' Similarly, drink driving, is lowest in social grade DE and similar in grades AB and C.<sup>54</sup> The RAC Report on Motoring 2018 found that, in its survey of 1727 motorists, 16% of those from the socio-economic background ABC1 (lower middle class, middle class and upper middle class) knew or thought they had driven over the limit in the past year compared to 7% from C2DE (skilled working class, working class and non-working).<sup>55</sup> Similarly, in a 2011 study of over 1700 motorists, respondents in managerial and professional occupations were more likely to say that they had driven after *one or two drinks* at least once or twice in the last year (44%) than those in routine and manual occupations (28%). Moreover, drivers in the highest income quintile were most likely to have driven when they had *drunk over the legal limit* at least once or twice in the last 12 months (14%).<sup>56</sup> Interestingly, these findings contrast with evidence from other countries, particularly the US and Australia, where drink driving is more prevalent amongst blue collar and administrative workers,<sup>57</sup> those from a lower socio-economic background and those with fewer qualifications.<sup>58</sup> A Swedish study also found that unemployment and support by the social welfare system was higher amongst drink drivers, particularly amongst women.<sup>59</sup>

## 5.7 Drug use

**SUMMARY: There is an association between drink driving and drug use**

International evidence suggests that drink driving is associated with drug use, both generally and on the night of the drink drive incident.<sup>60</sup> A Finnish study also found that drug use disorders were highly predictive of drink driving.<sup>61</sup> Repeat drink drive offenders have also been found to have particularly high rates of substance abuse.<sup>62</sup> An in depth study of Swedish drink drivers found that various drugs were used in combination with alcohol including cannabis (used by 19% of drink drivers), amphetamines (14%), barbiturates or sedatives (12%)

<sup>54</sup> Hopkin, J., Sykes, W., Groom, C., and Kelly, J. (2010). *A Qualitative Study of Drinking and Driving: Report on the Literature Review*. Road Safety Research Report No. 113, Department for Transport.

<sup>55</sup> RAC. (2018). 2018 Report on Motoring. RAC

<sup>56</sup> Road Safety Observatory. (Undated). *Drink Driving*. Road Safety Observatory.

<sup>57</sup> Impinen, A. et al. (2011). 'The Association between Social Determinants and Drunken Driving: A 15-Year Register-based Study of 81,125 Suspects'. *Alcohol and Alcoholism*, 46(6), 721-728.

<sup>58</sup> Morrison, L., Begg, D. J., Langley, J. D. (2002). Personal and situational influences on drink driving and sober driving among a cohort of young adults. *Injury Prevention*, 8(1), 111-115.

<sup>59</sup> Hubicka, B., Laurell, H., and Bergman, H. (2010). Psychosocial characteristics of drunk drivers assessed by the Addiction Severity Index, prediction of relapse. *Scandinavian Journal of Public Health*, 38(1), 71-77

<sup>60</sup> Morrison, L., Begg, D. J., Langley, J. D. (2002). Personal and situational influences on drink driving and sober driving among a cohort of young adults. *Injury Prevention*, 8(1), 111-115.

Dols, S., Gonzalez, F., Aleixandre, N., Vidal-Infer, A., Rodrigo, M., and Valderrama-Zurian, J. (2010). Predictors of driving after alcohol and drug use among adolescents in Valencia (Spain). *Accident Analysis and Prevention*, 42(6), 2024-2029.

Oshri, A., Carlson, M., Bord, S., and Zeichner, A. (2017). Alcohol-Impaired Driving: The Influence of Adverse Rearing Environments, Alcohol, Cannabis Use, and the Moderating Role of Anxiety. *Substance Use and Misuse*, 52(4): 507-517.

<sup>61</sup> Karjalainen, K., Lintonen, T., Joukamaa, M., and Lillsunde, P. (2013). Mental Disorders Associated with Driving under the Influence of Alcohol and/or Drugs: A Register-Based Study. *European Addiction Research*, 19, 113-120.

<sup>62</sup> Miller, P., Curtis, A., Sonderlund, A., Day, A., and Droste, N. (2015). 'Effectiveness of interventions for convicted DUI offenders in reducing recidivism: a systematic review of the peer-reviewed scientific literature.' *The American Journal of Drug and Alcohol Abuse*, 41:1, 16-29.

Goldenbeld, C., Blom, M. & Houwing, S. (2016). Zware alcoholovertreders in het verkeer. Omvang van het probleem en kenmerken van de overtredders. R-2016-12. SWOV, Den Haag.

opiates (5%), hallucinogens (4%), heroin (4%) and cocaine (3%).<sup>63</sup> However, it is not clear if this is the case in the UK. Data supplied to PACTS by the DVLA shows that 3,661 people with a drink drive offence had a subsequent drug drive offence since 2010. 964 people with a drug drive offence had a subsequent drink drive offence in the same period.

## 5.8 Reoffending

**SUMMARY: Since 2010, 7% of those who committed a drink driving offence were reoffending. Reoffenders committed 17% of drink driving offences since 2010.**

Data provided to PACTS by the DVLA shows that since 2010, 32,025 people committed a drink drive offence with a previous drink/drug drive offence on their record. This means that 7% of those who committed a drink driving offence were reoffending. 107,913 drink drive offences were committed by someone with a previous drink/drug driving offence on their record. This means 17% of drink drive offences were committed by someone who was reoffending. Eight people were convicted of causing death by careless driving when unfit through drink/with alcohol level above the limit with a previous drink/drug offence on their record. One driver was charged with driving or attempting to drive with alcohol level above the limit with 8 previous drink/drug drive offences on their record.<sup>64</sup> One person committed the offence 'driving or attempting to drive with drug level above the specified limit' when they had 18 previous drink or drug driving offences.

Those who reoffend are likely to do so soon after their earlier offence. 6,164 people committed a subsequent drink drive offence in the year after their first offence (note, data on reoffending were not supplied to PACTS in even time periods). 9,733 committed an offence one or two years after their first offence, 8,550 reoffended three or four years after, 5,482 five or six years after, 2,954 seven or eight years after and 904 nine or ten years after.<sup>65</sup> These data does not include those who drink drove but were not caught, this figure is likely to be substantially higher.

This dataset only shows offences back to 2010 e.g. someone who committed a drink drive offence in 2011 with a previous offence in 2009 would not be counted as reoffending. This is because of the data supplied to PACTS by DVLA from its Impala database. It is therefore likely that these data on reoffending are an underestimate.

These data do not provide insight into the profile of drink drive reoffenders. There is some evidence in the international drink driving literature that repeat offenders are more likely to have alcohol issues than others. One study from the US found that 97.5% of repeat drink drive offenders had a diagnosis of an alcohol use disorder in their lifetime.<sup>66</sup> Furthermore, a qualitative study of repeat drink drivers in the USA found that repeat offenders had substance misuse problems which contributed to their drink driving.<sup>67</sup> A study of drink drive driving across Europe also noted that many repeat offenders had underlying health problems relating to alcohol misuse or dependency.<sup>68</sup> While more research on reoffending in the UK would be useful, the available international evidence suggests that repeat drink drivers are more likely to have alcohol issues than the general population and first time offenders.

<sup>63</sup> Hubicka, B., Laurell, H., and Bergman, H. (2010). Psychosocial characteristics of drunk drivers assessed by the Addiction Severity Index, prediction of relapse. *Scandinavian Journal of Public Health*, 38(1), 71–77

<sup>64</sup> Data supplied to PACTS by the DVLA

<sup>65</sup> Data supplied to PACTS by the DVLA

<sup>66</sup> Shaffer, H. J., Nelson, S. E., LaPlante, D. A., LaBrie, R. A., Albanese, M., & Caro, G. (2007). The epidemiology of psychiatric disorders among repeat DUI offenders accepting a treatment-sentencing option. *Journal of Consulting and Clinical Psychology*, 75(5), 795-804

<sup>67</sup> Oshri, A., Carlson, M., Bord, S., and Zeichner, A. (2017). Alcohol-Impaired Driving: The Influence of Adverse Rearing Environments, Alcohol, Cannabis Use, and the Moderating Role of Anxiety. *Substance Use and Misuse*, 52(4): 507-517.

<sup>68</sup> Calinescu, T., and Adinaite, D. (2018). *Progress in reducing drink driving in Europe*. ETSC.

## 5.9 Criminality

**SUMMARY: Drink drivers are more likely than other drivers to have a criminal record, but generally for minor offences**

A Home Office study of the criminal records of traffic offenders found that drink drivers were twice as likely to have a criminal record as the general population and that 40% had a previous conviction. Drink drivers who had a previous conviction had on average 4.2 previous court appearances and 7.2 previous offences on average. While drink drivers were more likely to have a criminal record than the general population, they were less likely to than other 'serious traffic offenders', defined by the Home Office as disqualified drivers and dangerous drivers. Drink drivers are also less likely to have a criminal record or be involved in serious crime than drug drivers.<sup>69</sup>

## 5.10 Location

**SUMMARY: Drink driving is more common in urban than rural areas in the UK. Drink drivers often tend to know the area they are drink driving in and be travelling short distances**

In the UK drink driving appears to be more common in urban than rural areas. A 2010 survey found that the prevalence of driving after drinking in the last year on urban roads was higher than on rural roads (20% of respondents had driven after consuming some amount of alcohol in a built up area compared to 16% on rural roads). Similarly, the survey found that people drive more when they thought they might be over the legal limit on urban roads rather than rural roads.<sup>70</sup> The 2018 RAC Report on Motoring found a similar picture. 23% of motorists who lived in cities (and 32% of those who lived in London) reported that they knew or thought they had driven while over the limit. This compares to 7% amongst those who live in the suburbs and 5% in rural areas. These findings again contrast with research from the US and Australia where drink driving was found to be more prevalent in rural areas.<sup>71</sup> A 2011 survey also found that drinking before a drink drive event was most likely to occur at a pub or pubs, followed by drinking at someone else's home.<sup>72</sup> Journeys were often on roads that drink drivers know and feel safe on. Drink drive journeys also tended to be short, with the majority less than five miles.<sup>73</sup>

<sup>69</sup> Rose, G. (2000). *The Criminal Histories of Serious Traffic Offenders*. Home Office Research Study 206.

<sup>70</sup> Hopkin, J., Sykes, W., Groom, C., and Kelly, J. (2010). *A Qualitative Study of Drinking and Driving: Report on the Literature Review*. Road Safety Research Report No. 113, Department for Transport.

<sup>71</sup> Morrison, L., Begg, D. J., Langley, J. D. (2002). Personal and situational influences on drink driving and sober driving among a cohort of young adults. *Injury Prevention*, 8(1), 111-115.

<sup>72</sup> Road Safety Observatory. (Undated). *Drink Driving*. Road Safety Observatory.

<sup>73</sup> Hopkin, J., Sykes, W., Groom, C., and Kelly, J. (2010). *A Qualitative Study of Drinking and Driving: Report on the Literature Review*. Road Safety Research Report No. 113, Department for Transport.



5.11 Regional breakdown

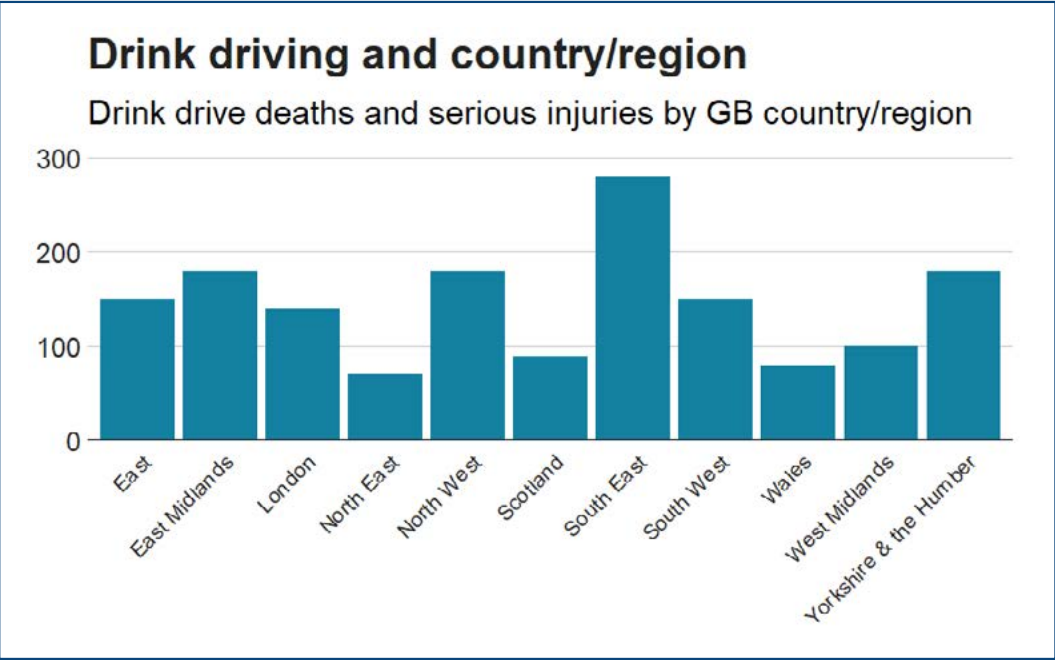


Figure 15: Drink drive deaths and serious injuries by nation/region, 2018 (RRCGB)

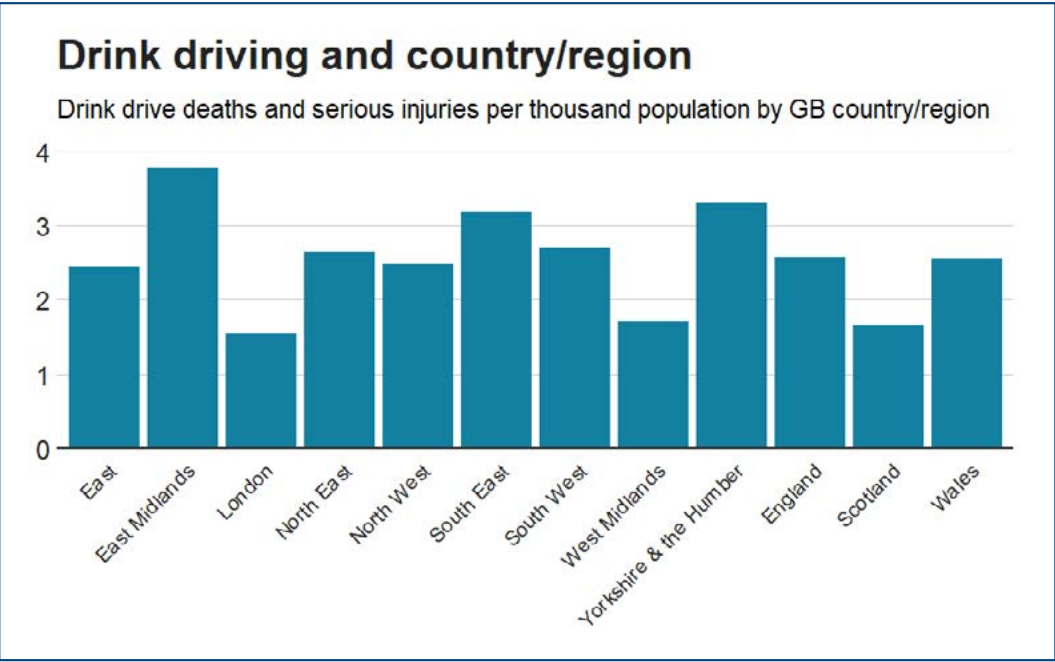


Figure 16: Drink drive deaths and serious injuries per thousand population by nation/region, 2018 (RRCGB)

When accounting for population, there is little regional difference in the number of drink drive related deaths and serious injuries. London, Scotland and the West Midlands have noticeably lower rates at 1.6 and 1.7 deaths per thousand people respectively and the East Midlands slightly higher at 3.7 deaths per thousand people. All other regions have between 2.4 and 3.3 deaths per thousand people.

CHAPTER 6  
Further research into profile





There is relatively strong data on the number of casualties which involve drink driving. However, the prevalence of drink driving on the road is less clear. This is in part because breath test data reflect patterns in enforcement as well as patterns in drink driving and surveys do not give as much depth about drink driving behaviour as other aspects of driver behaviour. Furthermore, the current data do not provide much information on the level of combined drink and drug driving. In 2012 and 2015 the Spanish government carried out roadside surveys to monitor psychoactive substance use amongst Spanish drivers. Around 3000 drivers were breath tested for alcohol and saliva tested for drugs. This survey provided an outstanding resource to help understand the extent and profile of drink and drug driving in Spain.

*The Department for Transport should investigate the feasibility of conducting a national roadside survey to determine the true levels of drink and drug driving.*

## CHAPTER 7

# Alcohol consumption in the UK



Across England, 19.7% of the adult population have an Alcohol Use Disorders Identification Test (AUDIT) score of 8 or above. This means their score indicates either 'hazardous drinking', 'harmful drinking/mild dependence, or 'probable dependence.' An AUDIT score of more than 8 suggests at least a 'probable need of brief alcohol intervention (e.g. in primary care). 3.1% of the adult population have an audit score of 16 or above (harmful drinking/mild dependence or probable dependence). Those scoring more than 16 may warrant at least 'an extended brief intervention and referral to specialist treatment for those who don't respond to the initial intervention.' 1.2% of the adult population have a score of 20 or more, indicating 'probable dependence' and the need for referral to specialist services for further assessment and treatment. Generally, the number of people with score of 20+ is under-estimated in surveys due to sampling and participation issues.<sup>74</sup>

There are stark differences in harmful and dependent drinking between ages and sexes. 13.4% of women have an AUDIT score of eight or more and 1.8% a score of 16 or more. By comparison, 26.3% of men have an AUDIT score of eight or more and 4.4% a score of 16 or more. Amongst women, harmful and dependent drinking decreases with age with 16-24 year olds having the highest level of harmful and dependent drinking (25.6% have a score of eight or more and 3.2% have a score of 16 or more). 25-34 year old men have the highest AUDIT scores of any age group with 32.4% having an AUDIT score of eight or more and 6.6% have a score of 16 or more. Both of these scores then decrease with age amongst men, though 16-24 year olds have lower scores than 25-34 year olds.<sup>75</sup>

Across most age groups the percentage of people who have audit scores above eight and 16 have decreased since 2000 (this survey is carried out every seven years). The decrease has been particularly significant amongst young people (the percentage of 16-24 year olds with a score of eight or more is nearly 12% lower in 2014 than 2000, and nearly 9% lower amongst 25-34 year olds. Those aged 55-64 are the only group reporting higher rates of harmful or dependent drinking in 2014 than 2000. Those ages 45-54 and 65-74 have seen small reductions in reported harmful and dependent drinking.<sup>76</sup>

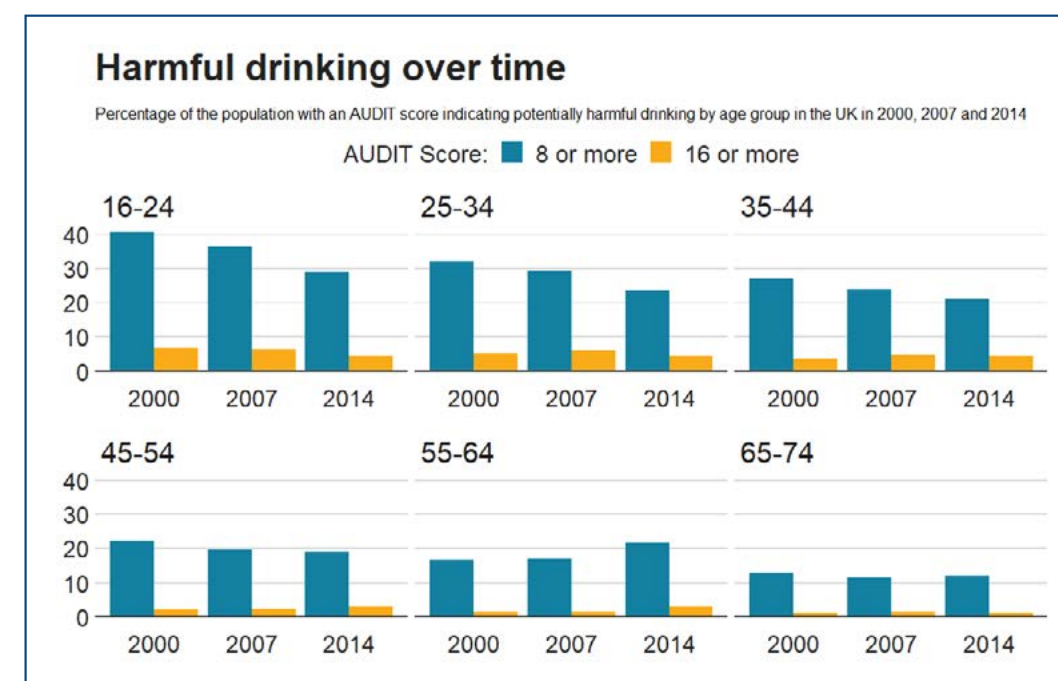
Amongst women, the percentage of people with scores of eight or greater has fallen just 0.8% and the percentage with scores of 16 or greater has increased by 0.7% between 2000 and 2014. There have been increases in harmful and dependent drinking amongst women aged 45-54 and 55-64 between 2000 and 2014. Reductions in harmful drinking have been significantly lower amongst young women than young men with the % of 16-24 year old men having a score of eight or more reducing 33% while for 16-24 year old women it reduced just 4%. Surveys have also found that while the overall level of drinking may be higher amongst young people, the level of binge drinking is similar amongst older age groups (25-44 year olds) and young people.<sup>77</sup> It has been suggested that the convergence in drinking between men and women is a product of both the increased accessibility and availability of alcohol (for example being available in a wider variety of outlets) and changing levels of social acceptability for women to drink in public.<sup>78</sup> In spite of the different trends between 2000 and 2014, men continue to have higher levels of harmful and dependent drinking than women.<sup>79</sup>

Harmful and dependent drinking is significantly higher amongst White British people than amongst other ethnic groups. 21.9% of White British people have an AUDIT score of 8 or

above, and 3.4% have a score of 16 or more. This compares to 16.2% and 2.1% amongst White other, 8.6% and 2.9% amongst Black/Black British, 5.4% and 1.0% amongst Asian/Asian British and 12.9% and 3.9% amongst Mixed/multiple/other. These differences remain when the groups are age standardised to account for different demographics in each group.<sup>80</sup>

A significant percentage of those whose AUDIT score indicates probable dependence have not been diagnosed with a substance dependence and do not think they have one. 57.8% of those with an AUDIT score of 20+ (probable dependence) do not think they have had substance dependence and 65.8% have not had substance dependence professionally diagnosed. Just 13.2% of this group have received counselling or therapy for any issues, including alcohol or drug counselling and 5.1% have had an unmet treatment request in the last year. 87.6% of those with an AUDIT score of 16-19 (harmful drinking or mild dependence) do not think they have had substance dependence and 94.9% have not had it professionally diagnosed.<sup>81</sup>

More recent data on alcohol consumption is available on alcohol consumption in units drunk per week, though with less detail than in the AUDIT scores. In 2017, 28% of men and 14% of women drank more than 14 units of alcohol per week. The mean number of units drunk in a week was 11.8 units across the UK adult population. Men consumed more units on average than women (15.0 units to 8.6 units). The trend in the level of increased and higher risk drinking (more than 14 units per week) can be seen in Figure 17.<sup>82</sup>



**Figure 17:** Percentage of the population with an AUDIT score indicating potentially harmful drinking by age group in the UK, 2000, 2007 and 2014. (NHS, 2017)

Despite trends in alcohol consumption indicating reduced levels of alcohol consumption and reduced harmful levels of drinking, hospital admissions in the UK due wholly or partly to alcohol consumption more than doubled between 2003/04 and 2013/14.<sup>83</sup> In 2017/18 there were 1.2 million hospital admissions where the primary reason for hospital admission

<sup>74</sup> NHS (2018). *Health Survey for England 2017*. NHS.

<sup>75</sup> NHS (2018). *Health Survey for England 2017*. NHS.

<sup>76</sup> NHS (2018). *Health Survey for England 2017*. NHS.

<sup>77</sup> Beuret, K., Corbett, C., and Ward, H. (2014). *Drinking among British Women and its impact on their pedestrian and driving activities*. Social Research Associates.

<sup>78</sup> Beuret, K., Corbett, C., and Ward, H. (2014). *Drinking among British Women and its impact on their pedestrian and driving activities*. Social Research Associates.

<sup>79</sup> NHS (2018). *Health Survey for England 2017*. NHS.

<sup>80</sup> NHS (2018). *Health Survey for England 2017*. NHS.

<sup>81</sup> NHS (2018). *Health Survey for England 2017*. NHS.

<sup>82</sup> NHS (2018). *Health Survey for England 2017*. NHS.

<sup>83</sup> Drummond, C., McBride, O., Fear, N., and Fuller, E. 'Alcohol Dependence' in No author. (2016). *Adult Psychiatric Morbidity Survey: Survey of Mental Health and Wellbeing, England, 2014*.



or a secondary diagnosis was linked to alcohol.<sup>84</sup> There were also 76,000 people treated for problematic drinking alone in 2017/2018. The estimated costs of alcohol related conditions to the NHS as a whole is £3.5bn per year.<sup>85</sup>

It is worth noting that older drinkers represent a significantly larger cost to the NHS (ten times that of younger drinkers) because of the cumulative and ongoing effects of lifelong heavy drinking.<sup>86</sup> Official statistics may significantly underestimate the true prevalence of alcohol related conditions in NHS hospitals due a lack of training and support for staff to diagnose treat and record alcohol related conditions.<sup>87</sup>

Furthermore, despite other chronic diseases which have a lower in hospital prevalence than alcohol problems being routinely screened for (such as diabetes, which also often has dedicated in-hospital specialist care teams) alcohol issues are not routinely screened for in hospital. A study which combined analyses of hospital admissions data calculated that the true prevalence of alcohol related admissions is approximately 20 to 30 times higher than in official UK government statistics. The study also calculated that one in five inpatients in UK hospitals are using alcohol harmfully (ten times higher than the UK population at large) and one in ten is alcohol dependent (eight times higher than the UK population at large).<sup>88</sup> Identifying and providing help for these vulnerable people could lead to decreased drink driving as we know that those with alcohol issues are significantly more likely to drink drive.

Specialist alcohol treatment services budgets and the number of people being able to access them have seen significant reductions in recent years in the UK. Specialist community drug and alcohol services have had funding cuts of around 30% since 2012 and since 2006, the number of NHS specialist addiction consultants has fallen by 48%. There has been a 22% reduction in the number of people accessing specialist community alcohol treatment since 2013/14 and a 54% reduction in specialist inpatient alcohol detoxifications since 2011/12.<sup>89</sup> These cuts pose a challenge to the treatment of those with alcohol issues. This is particularly relevant if those in the justice system are encouraged to screen drink drivers for alcohol problems and require treatment as part of sentences.

Data on alcohol consumption in the UK echo those on drink driving. Men are significantly more likely to drink more, have probable alcohol dependence and drink drive more than women. Younger people are more likely to drink more, have probable alcohol dependence and drink drive. For both alcohol consumption and drink driving the age discrepancy has reduced in recent years with young people drinking and drink driving less. The very young (16-20s) now appear both to drink less and to drink drive less than those in their late twenties, in contrast to recent years where drinking and drink driving reduced evenly with age.

During the coronavirus pandemic, there is not evidence of an increase in consumption of alcohol at a population level, with many people reporting that they have drunk less. However, there is some evidence that alcohol abuse may have increased during the pandemic and that people with alcohol issues may have been more likely to consume more alcohol and, if previously abstinent relapse. This evidence is still emerging and requires careful monitoring.

<sup>84</sup> NHS (2018). Health Survey for England 2017. NHS.

<sup>85</sup> Robert, E., Morse, R., Epstein, S., Hotopf, M., Leon, D., and Drummond, C. (2019). The prevalence of wholly attributable alcohol conditions in the United Kingdom hospital system: A systematic review, meta-analysis and meta-regression. *Addiction*.

<sup>86</sup> Beuret, K., Corbett, C., and Ward, H. (2014). *Drinking among British Women and its impact on their pedestrian and driving activities*. Social Research Associates.

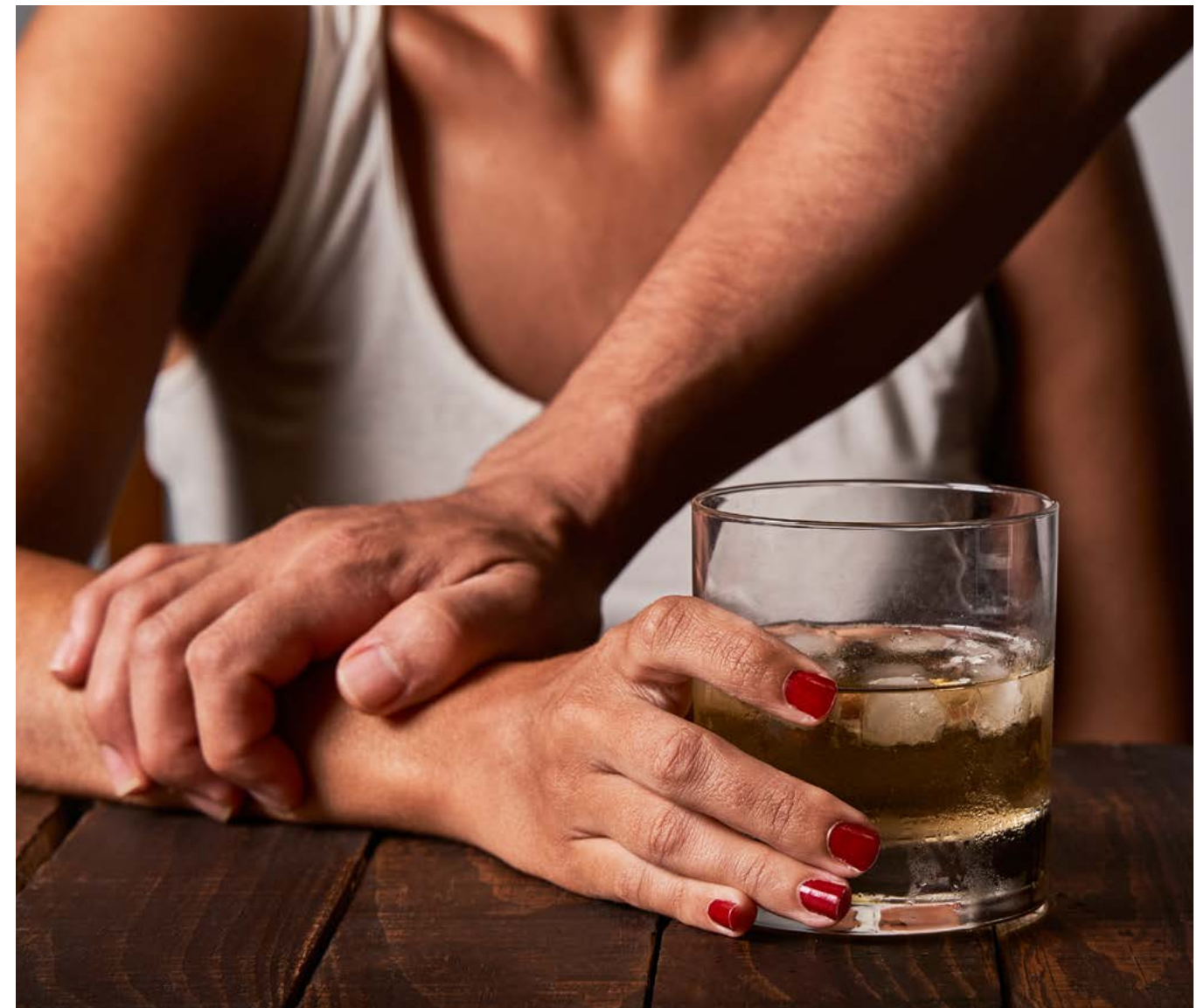
<sup>87</sup> Roberts, E., and Drummond, C. (2019). Alcohol related hospital admissions: Locking the door after the horse has bolted. *BMJ Opinion*.

<sup>88</sup> Robert, E., Morse, R., Epstein, S., Hotopf, M., Leon, D., and Drummond, C. (2019). The prevalence of wholly attributable alcohol conditions in the United Kingdom hospital system: A systematic review, meta-analysis and meta-regression. *Addiction*.

<sup>89</sup> Roberts, E., and Drummond, C. (2019). Alcohol related hospital admissions: Locking the door after the horse has bolted. *BMJ Opinion*.

## CHAPTER 8

# In-depth interviews with drink drivers





**As part of the PACTS research project, the University of Stirling and University of Dundee undertook confidential in-depth interviews with 30 volunteers who admitted to drink driving. This section was produced by those researchers. Their work informs the findings and recommendation of the report in its entirety.**

Principal Investigator: Dr. Andrea Mohan **University of Dundee**

Co-Investigator: Prof. Niamh Fitzgerald **University of Stirling**

Researchers: Dr. Isabelle Uny and Amelie Begley **University of Stirling**

## 8.1 Background

While a lot is known about the perception and experiences of drink drivers in general, there has been limited focus on repeat drink drivers, i.e. people who drink and drive regularly, in the published literature. As highlighted earlier in this report, many drink driving offences are caused by repeat drink drivers. This group of drivers may engage in more regular drink driving at higher blood levels, as they may be drinking alcohol in higher quantities and driving on a regular basis.<sup>91</sup> The 'Progress in reducing drink driving in Europe' report notes that people who have been convicted of drink driving multiple times may have an underlying health problem relating to alcohol misuse or dependency.<sup>92</sup> Thus, the behaviours, motivations and potential deterrents regarding drink driving may be different for repeat drink drivers, compared to drivers who have only drunk and driven once.

## 8.2 Aim of the interviews

In light of the limited evidence in the literature regarding repeat drink drivers, including those with an alcohol problem, this qualitative study was conducted, to better understand the various factors that lead repeat drink drivers to drink and drive.

The aim of this study was: to better understand the experiences and perceptions of repeat drink drivers (people who drank and drove regularly) in relation to motivations, perceived risks and deterrents. To our knowledge, no study in the UK has qualitatively explored these with this specific group of drivers.

## 8.3 Interview methodology

This was a qualitative study that involved semi-structured interviews with participants in the UK who admitted to drink driving on more than one occasion in the past and volunteered to be interviewed.

### 8.3.1 Sample

We sampled adults from the UK who had previously been involved in drinking and driving. Individuals were included if they were current or former drivers who: i) had one or more drink driving convictions, thus who had drunk and driven more than once, and did or did not have an underlying alcohol problem; or ii) had not been convicted of drink driving but reported drinking and driving on more than one occasion in the past, and did or did not have an

underlying alcohol problem. We deliberately did not define the term 'alcohol problem', as it may have been interpreted differently by participants. Instead, we let participants report their own alcohol-related issues. Individuals were excluded if they did not meet the two criteria mentioned above, or if they did not speak English. As we had a specific interest in drink drivers with current/past alcohol problems, some of our recruitment methods (see below) were designed to target this specific population. Thus, we did not intend for this sample to be representative of the current profile of drink drivers in the UK.

### 8.3.2 Recruitment

Recruitment relied on a range of pragmatic methods to get potential participants to proactively respond to a study advertisement (advert) (see Appendix 2.1); the advert included contact information for the research team so that participants could contact the researchers directly. Organisations and groups that were involved in treating or supporting people to recover from alcohol and/or other drug problems in the UK were initially contacted via email or by phone and given information about the study. Those organisations/groups that agreed to help publicise the study were sent the study advert via email and were asked to send the advert to eligible participants and to their networks, or to post it on their Facebook page, Twitter feed or website. This approach has previously been used in research with regular drink driving offenders in the USA.<sup>93</sup>

A similar approach was used when contacting public engagement groups involved in alcohol and tobacco research, and road safety organisations, to ask them to publicise the study to their networks. We asked their permission to publicise the study on a website that provided information about drink driving convictions in the UK (drinkdriving.org). The advert was also posted on Twitter, and various academics, research groups, alcohol support groups and road safety organisations were tagged and asked to retweet the ad. The ad was also posted on the Facebook pages of the UK Centre for Tobacco and Alcohol Studies (a network of 13 universities) and a sobriety group.

In total, 37 individuals initially contacted the research team to express their interest in taking part, however, 7 of these never responded to an invitation to take part in an interview. In the end, 30 eligible participants were recruited. The characteristics of these participants are provided in Table 1 in the Results section.

Individuals who contacted the research team were asked screening questions to establish their eligibility to take part in the study (Appendix 2.2). All participants were sent a participant information form and privacy notice via email, which provided further information. Individuals were given a minimum of two days to decide if they wanted to take part in the study, and consent was obtained via a signed consent form sent by email or recorded verbally before the start of the interview. Participants were assigned pseudonyms to protect their identities.

### 8.3.3 Data collection

Once an individual confirmed their interest in participating in the study, they were invited to take part in a semi-structured interview, either by telephone or face-to-face. We offered both interview options to participants prior to the COVID-19 pandemic, and the only face-to-face interview was conducted in 2019, before the pandemic hit the UK. Interviews were conducted by Dr. Andrea Mohan (AM), Amelie Begley (AB) and Dr. Isabelle Uny (IU), all of whom have experience in conducting qualitative interviews. The interviews were conducted between November 2019 and June 2020 and were audio recorded. In total, 30 interviews were conducted: 29 via telephone and one face-to-face. Interviewers used a topic guide

<sup>91</sup> Schulze H, Schumacher M, Urmeew R, Alvarez J, Bernhoft IM, de Gier HG, et al. (2012) *Driving Under the Influence of Drugs, Alcohol and Medicines in Europe – findings from the DRUID project*. DRUID Thematic Papers. Luxembourg: European Monitoring Centre for Drugs and Drug Addiction.

<sup>92</sup> Calinescu T and Admintaite D (2018) *Progress in reducing drink driving in Europe*. Brussels: European Transport Safety Council.

<sup>93</sup> Carlson RG, Sexton R, Hammar L and Reese TH (2011) Driving themselves to drink: Qualitative perspectives from "hardcore" DUI repeat offenders in Ohio. *Journal of ethnicity in substance abuse*, 10(4), pp.363-379.

(Appendix 2.3 and 2.4) to help steer the interview. The topic guide contained questions and prompts to encourage participants to talk about their experiences of and give perspectives on drink driving. After the first four interviews were completed and reflected on, the topic guide was tweaked. Interviews ranged from 16 to 93 minutes in duration. Participants were given £30 worth of Love2Shop vouchers.

The COVID-19 pandemic impacted on this study in four ways. First, the pace of recruitment was slowed when the UK went into lockdown as a result of the COVID-19 pandemic in March 2020. Second, one member of the research team was furloughed, which led to reduced capacity to conduct interviews. This and the first reason led to the study to be extended to September 2020 (the previous end date was May 2020). Third, in some of the interviews conducted after lockdown, some participants spoke of the impact that COVID-19 was having on their lives, including their alcohol recovery journey. Fourth, some participants who were interviewed between March and June 2020 were offered £30 via bank transfer, instead of £30 worth of Love2Shop vouchers.

### 8.3.4 Data analysis

Interviews were transcribed verbatim by professional transcribers. A sample of five transcripts were cross-checked by AM and AB alongside their audio recordings to ensure accuracy of transcribing. There were slight differences between the audio and the transcripts in some places, therefore, for subsequent transcripts, audio was checked where the transcriber had indicated there was difficulty hearing, or where the text suggested something different may have been said. NVivo 12 was used to store transcripts and aid in data management and coding.

Thematic analysis was the method used to analyse the data. AM and AB independently coded the same five transcripts that were initially cross-checked, using an inductive approach. The researchers then met to discuss the main topics and issues that came from the data. Based on this, an initial coding framework was developed. AB and IU subsequently coded four additional transcripts and following discussions and agreement with AM, the coding framework was refined (Appendix b). AM and IU coded the remaining transcripts, then met to discuss the themes that came from the coding.

## 8.4 Interview Results

### 8.4.1 Participant and interview characteristics

Table 4 provides a breakdown of the characteristics of the 30 participants. Half (15) were female, and ages ranged from 23-63 years. Fifteen participants were based in England, 11 in Scotland, 3 in Wales and 1 in Northern Ireland. Thirteen participants had a past or current drink drive conviction – of these, one had two past convictions while another had three. Eighteen participants reported having an alcohol problem; 7 of these had a drink driving conviction. Fifteen participants reported having a mental health problem during the times they drank and drove; 8 of these had a drink driving conviction.

### 8.4.2 Varied circumstances, risks and harms of drink driving

Participants described the circumstances of their drink driving events. There were four categories: a) driving to get home after socialising; b) driving the morning after; c) driving while frequently under the influence of alcohol; and d) driving while dealing with a mental health crisis.

### a) Driving to get home after socialising

This was the most commonly reported circumstance of drink driving among all participants, regardless of whether they did or did not have an alcohol or mental health problem. Participants described driving home after drinking socially with family, friends or colleagues, typically at a pub, restaurant or someone's house. Most participants reported not having intended to drive but having decided to for various reasons. Two participants reported that they had planned on spending the night at the house they were drinking at, but decided to drive to their own home after an argument broke out. A few participants mentioned wanting to use alternative transport, such as a taxi, but due to a change in weather, leaving the drinking venue too late, or the taxi taking too long to arrive, they decided to drive. Others did plan on driving, so only intended on having one or two drinks but ended up drinking more and still driving home due to feeling 'safe' to do so. Most of the participants who drove in this circumstance did not get caught and managed to get home safely despite some reporting driving dangerously e.g. wheels constantly hitting the kerb or puncturing tyres. Only a few people did get caught because they caused a collision e.g. hitting another vehicle:

*"It actually was a very spontaneous event. We used to work in a hotel and every Friday when we finished, we'd go and have one drink and then we'd all go home. But this particular night we decided that we'd have a few more drinks, we had a bit of dinner...Stupidly I thought I'm okay, I can drive...some people, when they're drunk they think they can do absolutely anything...I got into my car, I got 300 yards down the road and I went into the back of a Land Rover."*

(Darcy, F, 43, England, DD conviction)

Other consequences of drink driving included driving into a fence and building, hitting an animal and one person reported colliding with a pedestrian (though their breath test was negative for alcohol).

Table 4 – Participant characteristics

Participant	Sex	Age	Location	Occupation	Drink drive Conviction (Y/N) (if Y, no of convictions, attended drink drive rehab (Y/N))	No. of drink drive convictions	Self-reported alcohol problem (Y/N) (If yes, sought help for problem (Y/N))	Mental Health problem
Ruby	Female	50	England	Student	N	N/A	Y (Y)	Y
Stephanie	Female	51	England	Stay at home parent	Y (2,N)	2	Y (Y)	Y
Nancy	Female	59	England	Retired	N	N/A	Y (Y)	N
Oliver	Male	23	Northern Ireland	Student	Y (1,Y)	1	Y (Y)	N
Darcy	Female	43	England	Hotel manager	Y (1,Y)	1	N	N
Logan	Male	34	Scotland	Police officer	N	N/A	N	Y
Joshua	Male	60	Scotland	Care worker	N	N/A	N	N
Henry	Male	29	England	Surveyor	Y (1,NR)	1	Y (Y)	Y
Max	Male	49	Scotland	Local authority worker	Y (1,N)	1	N	N
Lucas	Male	48	Scotland	Local authority worker	Y (1,Y)	1	Y (Y)	Y
Dylan	Male	63	Scotland	Unemployed	Y (1,N)	1	Y (Y)	Y
Zara	Female	45	Scotland	Web engineer	N	N/A	N	N
Julie	Female	45	Scotland	Teacher	Y (1,N)	1	N	Y
Daisy	Female	56	Scotland	NR	N	N/A	N	N
Jaxon	Male	57	Scotland	Taxi driver	N	N/A	Y (Y)	Y
Phoebe	Female	61	Scotland	Support worker	N	N/A	Y (Y)	Y
Freya	Female	48	Scotland	NR	N	N/A	N	N
Toby	Male	42	England	Business owner	N	N/A	N	N
Jasmine	Female	58	England	Professor	Y (1,Y)	1	N	N
Rose	Female	43	England	Business manager	Y (1,Y)	1	N	Y
Carter	Male	50	Wales	Support worker	Y (1,Y)	1	Y (N)	Y
Hugo	Male	63	Wales	Retired	N	N/A	Y (Y)	N
Jude	Male	46	Wales	Support worker	Y (1,NR)	1	Y (Y)	N

Participant	Sex	Age	Location	Occupation	Drink drive Conviction (Y/N) (if Y, no of convictions, attended drink drive rehab (Y/N))	No. of drink drive convictions	Self-reported alcohol problem (Y/N) (If yes, sought help for problem (Y/N))	Mental Health problem
Lexi	Female	38	England	Consultant	N	N/A	Y (Y)	N
Caleb	Male	41	England	Delivery driver	Y (3,N)	3	Y (Y)	Y
Leon	Male	45	England	Magistrate	N	N/A	Y (Y)	Y
Stan	Male	35	England	Academic	N	N/A	N	N
Megan	Female	54	England	NR	N	N/A	Y (Y)	Y
Erin	Female	49	England	Web engineer	N	N/A	Y (Y)	N
Holy	Female	37	England	Teacher	N	N/A	Y (Y)	Y

Y – Yes; N – No; N/A – Not applicable; NR – not recorded

b) Driving the morning after

Another common circumstance of drink driving was driving the morning after a heavy or late-night drinking session. Though common, this circumstance was not as common as driving immediately or soon after drinking socially and was reported among participants who did or did not have an alcohol problem. Participants had either drunk with others or by themselves, then got up in the morning, usually between 7 and 8am, to drive. Reasons for driving included needing to get to work, run errands or buy more alcohol. Four participants received a conviction for drink driving the morning after. Most participants who drove in this situation described feeling okay to drive at that point, but were stopped by the police for erratic driving:

“...the next day, got up absolutely fine, walked the dog, set off for work...there’s an area in my village where cars all park and as I was driving, somebody started to open the door so I had to pull out and then I carried on and then I was pulled over by the police.”

(Jasmine, F, 58, England, DD conviction)

c) Driving while frequently under the influence of alcohol

18 of our participants reported having an alcohol problem at the time of drink driving, with 17 drinking frequently, sometimes daily. Fourteen considered themselves to be alcohol dependent (with one person also using class A drugs) in the past, and all 14 were in recovery at the time the study was conducted. Three participants identified as heavy, social drinkers. There were also a few participants who said they drank heavily in the past but did not report this as an alcohol problem. Of the 17 frequent drinkers, 11 also reported having a mental health problem at the time of drink driving.

Nine participants had started drinking either at the age of 11 or 12, or in the later teens, and described how drinking alcohol was common among households (among parents and other relatives) or friends at school. Most of these participants had only recognised their drinking as problematic either in their late teens or early twenties, but one person spoke of experiencing blackouts at age 12. Nine participants had started drinking in their early



twenties or later and noticed that their drinking was problematic in their late twenties or later. Most participants reported that heavy drinking was common in their social circles, but only considered their drinking as problematic after their mental health worsened. Reasons for worsening mental included experiencing a traumatic event such as the loss of a close family member, and experiencing stress, anxiety or depression. Problematic drinking was considered as drinking more than other people in participants' social circles, or drinking that led to medical problems.

In this circumstance of drink driving, all of the 17 frequent drinkers reported driving on a regular basis, sometimes daily. This meant that driving over the limit occurred at any time during the day, but mostly late at night or very early in the morning. For those who identified as alcohol-dependent, one of the most common reasons for driving was to buy or find more alcohol. While most participants reported driving short distances for this purpose, a few admitted to driving longer distances:

*"I was drinking with just one friend after work, had some wine at her house but she lives about 20 miles from my house and then we drank maybe 3 bottles of wine between us and then I decided that I wanted more wine...I left the house, told her I was walking, but I didn't have my bank card so I drove my car the 20 miles back to my house to get my bank card to go to a garage to get wine to go back to her house...I was definitely like I shouldn't be doing this, I can barely see. What if something happens but kind of that, need for more alcohol was greater than the consequences of what could have happened."*

(Holly, F, 37, England, in recovery (alcohol))

Similar to Holly, many other participants who drank and drove in this circumstance admitted to being aware of their actions, and knowing that it was wrong at the time, but there were others who reported that they just did not think about it at the time. A small number of people described not being aware of drink driving during the actual event, and only becoming aware after, either from seeing evidence in the form of empty alcohol bottles, or being caught by the police:

*"One night I was playing the Play Station and I was drinking and then an hour or two after, I completely blanked out. The rest is almost completely forgotten. I was stopped by a police car outside and they pulled me over because I either driving too slow, or over the road or whatever and they smelled that I had been drinking."*

(Henry, M, 49, England, DD conviction, in recovery (alcohol))

All but one of these drink driving events involved participants being behind the wheel. There was one participant who had moved their vehicle from one space to another in a parking lot a few hours after a heavy drinking session with friends. The participant was stopped walking away from their vehicle by the police, who had suspected that the participant had stolen the vehicle. The participant was subsequently breathalysed and charged.

Nearly all participants who reported an alcohol problem were in recovery at the time of the interview. Many reported seeking help for their problem only after being caught drink driving, or after experiencing a serious event (not necessarily drink driving), e.g. being hospitalised due to their drinking. Such instances were often described as 'turning points' which prompted them to seek treatment or support through NHS services or community groups such as Alcoholics Anonymous (AA).

There were mixed views on the helpfulness of NHS services and community groups, especially the AA. A few participants who mentioned seeking help from the NHS said that they received advice on getting further help or medication to treat their problems, but most found this to be unhelpful, as it did not deal with the underlying cause of their alcohol problem. One Scottish participant reported that his GP advised him to report his alcohol problem to the DVLA, which resulted in his driving licence being temporarily taken off him until he could prove that he was medically fit to drive. Thus, he had to recover from his alcohol problem in order to pass his medical; this meant that the reporting of his alcohol problem to the DVLA indirectly led to his recovery. Participants who had attended the AA either found it be helpful in their recovery journey, while others felt that the AA was simply not for them and sought help from other groups (e.g. Facebook sobriety group).

#### **d) Driving while experiencing a mental health crisis**

Three participants spoke of dealing with a crisis or event brought on by a recent or past traumatic event or series of events. Unlike participants in category c), these three participants did not drink on a regular basis. Instead, the crisis or event that they were dealing with had triggered one or more irregular bouts of heaving drinking. In all three cases, participants' post-traumatic condition was not diagnosed up to the point of their drink driving events.

Two participants were caught drink driving at night. One described being triggered by a case at work that brought up past traumatic memories, while another had recently gone through a miscarriage and was extremely stressed from work. Both had drunk large amounts and drove shortly after this – one was stopped for driving over the while line in the road, while the other had crashed into a parked car. A third participant, Stephanie, had received 2 convictions and was later diagnosed with complex PTSD, reported experiencing crises which triggered them to drink uncontrollably:

*"...something had triggered me and I can't even remember what it was now. It was still a highly stressful time, running around with mum having episodic periods of dementia. So basically, I had crashed – not crashed the car, I had gone into a crisis - I used to call them dips - but basically, regardless of that I'd started to drink excessively and out of control."*

(Stephanie, F, 51, England, DD conviction, in recovery (mental health))

On one occasion, Stephanie had been in a collision with a parked car, and in another, she was seen approaching her car after having bought alcohol from a store.

#### **8.4.3 Justifications for repeat drink driving**

All participants explained their justifications for drink driving and acknowledged the risks associated with drink driving; it should be noted that most participants were keen to stress that these were reasons, not justifications. Nearly all participants, regardless of whether they had an alcohol problem or not, reported being primarily concerned about harming other people and had little consideration for their own safety. As a result, many participants reported driving only when they were alone, although a few admitted occasionally driving with their children, friends or partners. Many participants were all concerned about getting caught by the police. Therefore, most justifications for drink driving centred on avoiding harming others and avoiding being captured by the police.

Driving very late at night or early in the morning was commonly mentioned in relation to avoiding harm to other people outside of the vehicle:

*"It was the early hours – this is how I justified it in my mind. It's the early hours of the morning, it's dark, there's hardly anybody on the road. If anybody is going to die, it's going to be me. It's not like I'm going to kill anybody."*

(Ruby, F, 50, England, in recovery (alcohol))

Only having to drive short distances was another common justification given by participants; this was only in relation to avoiding being caught by police, and not avoiding harm to others:

*"I don't think I've ever driven completely smashed but, well, I mean, I've certainly driven after, kind of, three large wines quite frequently but not long distances generally. And I've just always chanced it really because I've always perceived that there's a very slim chance of getting stopped."*

(Leon, M, 45, England, in recovery (alcohol))

Additionally, one participant also mentioned avoiding schools, to avoid harming children.

These justifications were rarely the sole reason for repeat drink driving. Participants also considered how intoxicated they felt after drinking, with most reporting feeling 'fine' or safe to drive despite having several drinks. However, many who drove in these situations admitted in hindsight that their judgements would have been impaired by the effects of alcohol:

**"Carter:** *It was an imbalance of me being intoxicated, which I was, but my ability to think that I could control the situation, which was obviously misguided that time.*

**Interviewer:** *So you knew you were intoxicated, but you didn't feel drunk?*

**Carter:** *Yes absolutely.*

**Interviewer:** *So what does being drunk feel like to you, or what did it feel back then?*

**Carter:** *...Drunk is something eighteen year olds in a local park with a bottle of Frosty Jacks."*

(Carter, M 50, Wales, DD conviction, in recovery (alcohol))

Many participants also admitted that not being caught by the police led to the normalisation of this behaviour. A few also indicated that drink driving was normal in their family or social circles, or in the areas where they lived (e.g. rural Wales). The normalisation of drink driving meant that drink driving was done on a regular basis for some participants:

*"Yeah I did on many occasions...in the month that I crashed I'd maybe done it 10 times because like I said...once you've done it a few times you think...people [who were banned] were bad at it but I'm good at it...I felt like I was good at this and that I was never going to get caught until of course I crashed."*

(Oliver, M, 23, Northern Ireland, DD conviction, in recovery (alcohol))

A few male and female participants also acknowledged that they had been drunk and driven more frequently when they were younger, citing that risk-taking was common in younger life.

While most participants spoke of being aware of risks associated with drink driving, some who considered themselves to be very dependent on alcohol reported not being aware

of these risks at that time. This was because their need for alcohol often overruled all rationale thinking:

*"You rationalise it all the way through...I couldn't leave the house unless I had a drink, so I've got to drive 'cos I'm working. So, unless I drink, I can't go to work. So, then you're stuck...You're crazy the way you look at things. It is crazy, but it made perfect sense. That is the trouble."*

(Hugo, M, 63, Wales, in recovery (alcohol))

#### 8.4.4 Consequences of drink driving

While there were many physical consequences of drink driving, the more notable consequences brought personal costs to participants and their families. Many participants acknowledged that they did not think about these consequences before drink driving.

##### a) Emotional and mental impact

One of the most salient consequences was the emotional and mental impact on an individual. Nearly all participants described feeling guilt, shame, disappointment, fear and remorse, regardless of being caught or not. Only a few participants reported feeling these emotions while drink driving, while most experienced these immediately after. Many who did not get caught tended to reflect on what could have happened, including causing serious harm to others or themselves, and being caught by the police:

*"I think thankfully I can say that nothing happened...I mean lucky I can say that. But as we all say, it didn't happen to you yet right but if I'd carried on who would have known? We don't know right. But the thing is you just take your life into your own hands and you're not thinking clearly at all...this drink and drive - it doesn't occur to you that you're doing it at all."*

(Nancy, F, 59, England, in recovery (alcohol))

Despite experiencing these emotions after an initial drink driving event, several participants admitted to subsequently repeating this behaviour many times.

Many participants, regardless of if they had a drink driving conviction or not, chose not to tell others, or only told a few people who were close to the, about the drink driving event due to feeling ashamed and fear of being judged. A few participants did tell and reported a mixture of responses from others. Some participants' family, friends or colleagues, despite being angry or disappointed, remained supportive, and in a few cases, encouraged participants to seek help for their alcohol and/or mental health problems. Other participants reported that they lost the respect of their family and colleagues, and a few participants lost friends or partners as a result.

Two participants had circumstances of their drink driving event and personal details published in local newspapers. This was considered a further punishment, and caused further shame and/or guilt:

*"...I never denied anything and I held up my hands from the word go and I said I'm sorry I made a huge mistake...It was actually my manager who had come in... and she said I take it you realize you have ended up in the paper and...she said... it's a half page story about you, and actually I just felt physically sick...I don't know if angry is the word but I was disappointed, upset, anxious because I was then*

*just trying to deal with it and I was...getting on and accepting my punishment..”*

(Lucas, M, 48, Scotland, DD conviction, in recovery (alcohol and mental health))

In addition to these emotions, a few participants who had a drink driving conviction, particularly female, reported being treated like criminals by the police, and spoke of feeling judged or disrespected, being treated inhumanely or without compassion, while detained at the police station. One participant was left deeply traumatised by a sequence of events from the point of being stopped by the police, i.e. being disrespected, not being given a phone call, having information poorly communicated to her, and having to wait very long for a court appearance. This subsequently resulted in her developing paranoia for the police:

*“...it was 163 days [waiting time for court letter]...I got paranoid when the post van went passed thinking what was in it, opening the letterbox every day because it’s an external letterbox, it was fearful. Everyone kept saying have you heard... it was very difficult to plan, and it was very difficult to get my life narrative back on track...It was hanging over me like a black cloud...and also driving, I was constantly looking for police...I went to the Lake District and a friend was driving and she said you’re spooked by the police because every time we went past, she said you’re jumping.”*

(Jasmine, F, 58, England, DD conviction)

Even when there were no physical consequences from a drink driving event, most participants, particularly the women, acknowledged still feeling guilty or angry with themselves, and feeling lucky that they got home safely.

#### **b) Temporary loss of driving licence**

The thirteen participants who lost their driving licences temporarily reported varying impacts on their lives. Only a few viewed this loss as having a minimal impact and adapted pragmatically by taking public transport or getting lifts from others. Most participants viewed this loss as an inconvenience that limited their freedom. In a few cases, a lost license resulted in participants losing their jobs or having to resign from jobs. For one person, being unemployed plus having to pay drink driving fines, on top of other expenses, led to serious financial difficulties and the loss of his home:

*“I’m in my early 60s, I’ve been unemployed for the last three years through loss of my licence...I’ve been homeless for about a year because of it...I’ve sort of consolidated things now, I’ve had to sell my house and all sorts Universal Credit doesn’t cover your mortgage.”*

(Dylan, M, 63, Scotland, DD conviction, in recovery (alcohol))

Most participants managed to keep their jobs but were still affected financially, for e.g. by having to move closer to public transport, or having to pay higher car insurance premiums. A few participants were affected professionally, for e.g. being unable to progress their career, or being denied entry to other countries for work due to having a drink driving conviction. These participants noted that such consequences were never mentioned in media communication about drink driving, and wanted the public to be more aware of these.

#### **c) Behavioural changes**

Regardless of being convicted or not, several participants reported making changes to their behaviours because their drink driving. Most of these changes were made to prevent future drink driving, but also to benefit participants’ physical and mental wellbeing.

The most commonly reported change was to drinking behaviour. A few participants made a conscious decision to drink less to ensure they would always be below the drink drive limit. A few used a breathalyser or alcohol counter to help them keep track of how much they were drinking. One participant who had visited Scotland reported limiting the number of drinks bought to ensure that he had remained under the lower drink drive limit. However, many participants, particularly those with past alcohol problems, reported stopping drinking all together – a few managed to avoid alcohol up to the time of the study, but many admitted relapsing at least once. A few participants acknowledged that their drink driving event gave them the necessary push to seek help for their alcohol problem:

*“This may sound really selfish and maybe morbid but I’m glad it happened because if it didn’t happen, I quite well could have drank myself to death. My doctor himself has told me that if I had of continued drinking the way that I was drinking at the time, that I probably wouldn’t be alive this year...I’m ashamed of doing it but if I had to go back you know, it helped me in the long run you know which is probably a very, very selfish outlook.”*

(Oliver, M, 23, Northern Ireland, DD conviction, in recovery (alcohol))

Similarly, a few participants with mental health problems, particularly those that were linked to a traumatic event, were encouraged to seek help as a result of their drink driving event:

*“...it [counselling for post-traumatic events] was more recommended to me after I’d spoke about it [with colleagues] and more people were like...you should maybe look at it and then I phoned up like a helpline and eventually it was organised...I hadn’t considered it before you know? That was the first ever time that I’d attended something like that.”*

(Logan, M 34, Scotland, DD conviction, in recovery (mental health))

Another behaviour change was linked to feeling in an increased sense of responsibility for self and others. For example, a few participants started to ensure that alternative transportation for getting home was arranged prior to going out.

There were a few reports of changing driving behaviour. A small number of participants had stopped driving due to no longer needing to, because of they had adapted well without having a licence. But a few participants reported stopping driving out of fear of being involved in another collision, or drink driving.

#### **8.4.5 Perceptions of drink driving and drink drivers**

Participants were asked what they thought of when they heard the term ‘drink driving’ or ‘drink driver’ and spoke about this in relation to themselves, others and society (Figure 2). The drink drive limit was likened to other enforced measures that were necessary to protect public health, such as the smoking ban, using a seatbelt, or the penalties for carrying a knife.

On reflection, most participants considered themselves to be a drink driver, either during the time of separate drink driving events, or over the whole period that they drank and drove. Additionally, many acknowledged that their own drink driving was dangerous and selfish



because of the risks involved and believed that drink driving was stigmatised by society. Many believed this stigma was necessary to continue dissuading people from engaging in the behaviour, but a few thought that stigmatisation was counter-intuitive and punishing to people who genuinely needed help for their alcohol or mental health problems. A few participants also believed the drink driving laws in the UK were too lenient, as many people continued to drink drive with few repercussions.

SELF	OTHERS	SOCIETY
<p>Drink driving is: 'dumb', 'dangerous', 'selfish', 'stupid', 'irresponsible'</p> <p>Acknowledged element of risk-taking</p> <p>Acknowledged denial about drinking and/or driving behaviour</p> <p>Drink driving a one-time or habitual thing</p> <p>Comparison with oneself to other drink drivers</p>	<p>Drink driver is: 'person who takes the easy way out', 'older white guy out at his local having five or six pints'</p> <p>Judgemental attitude or no tolerance towards other drink drivers</p> <p>Drink drivers can be classified according to personal circumstances</p> <p>Someone who takes the easy way out</p> <p>Choose not to judge/no stereotypical drink driver</p>	<p>Drink driving is: 'stigmatised', 'judgemental';</p> <p>Drink drivers are: 'bad', 'weak-willed', 'law-breakers', 'no sense of control'</p> <p>Misperception of drink driving meaning being drunk behind the wheel</p> <p>Drink driving laws too lenient &amp; there is a lesser punishment for some groups e.g. wealthy</p>

**Figure 18** – Perceptions of the different views on drink driving and drink drivers

Many participants, particularly those who attended probation, drink drive rehabilitation courses or recovery groups, tended to compare themselves to other drink drivers that they knew. Most participants did not think their own drink driving was as 'bad' as other people in these courses or groups, mainly because those other people had either been caught with higher blood alcohol levels, or had cause serious harm to someone else. In most cases, participants admitted having no tolerance to other drink drivers, and a few passed judgements on people who had caused serious harm or killed other people while drink driving.

Though most participants believed that society held the misperception that drink driving was being extremely drunk behind the wheel (they were aware that drink driving included driving after drinking without being drunk), many still gave stereotypical views of who they considered to be a drink driver i.e. a male (young, middle-aged or older), who intentionally drove after getting drunk at the pub. However, participants who had an alcohol or mental health problem also acknowledged that there was a category of drink drivers who, like them, did not fall under the stereotypical drink driver, and either tended to have empathy or did not want to pass judgement on this group of drink drivers.

#### 8.4.6 Experiences with drink driving sentencing and rehabilitation

##### a) Opinions on sentencing and rehabilitation

Most of the 13 participants who were convicted of drink driving were able to recall the driving bans, fines and other punishment received. Driving bans ranged from 6 months to 5 years,

while the highest fine received was £1200. Additionally, two people given a community service and one received a suspended prison sentence after their third drink driving conviction.

All 13 participants understood why drink driving laws were needed, but there was a mixed view of the fairness of their sentences. More than half of participants felt their sentences were a fair punishment for what they had done, with a few feeling lucky as they had expected to receive a harsher sentence, due to how high their blood alcohol levels were when they received their breath/blood test. However, a few participants felt that their sentences were unfair, either because their personal circumstances were not taken into consideration, that sentencing was only based on one person's (magistrate/judge) opinion, or because people who had committed similar offences had received a more lenient sentence compared to them:

*"I got quite angry about that [receiving 2-year ban] because one of the girls, she was probably 10% lower than me on her reading and she got a 12 month ban... so there's no consistency."*  
(Darcy, F, 43, England, DD conviction)

Six participants attended a drink drive rehabilitation course, which slightly reduced their driving ban period. All but one participant thought these courses were very helpful, particularly because they gained knowledge about how alcohol affects the body. The one participant who did not find the course helpful had attended only one session, as they felt it was a place for men who were heavy drinkers to brag about their drinking habits.

##### b) Opinions on sentencing and rehabilitation for people with alcohol problems

Many participants who had an alcohol problem said that this was never mentioned or considered in court. Most believed this was because they did not look like the typical person who had an alcohol problem, and a few believed that they may have received a more lenient sentence if their problem had been acknowledged in the judge's ruling:

*"Despite the fact I was four or five times – I was massively over the limit...I was very scared in court, because there was the risk I could get sent to prison by the magistrate, because of how over the limit I was. It was a bit of a joke. I think they probably looked at my age, they looked at the fact that I'd had a shave before I went into court. It hadn't crossed their mind that there might be an alcohol issue...I was classified as a high risk then. There was obviously some form of alcohol dependency, but that...funnily enough doesn't come up in court."*  
(Jude, M, 46, Wales, DD conviction, in recovery (alcohol))

There was one participant who was convinced that his light sentence was due to the fact that he was going to attend a reputable alcohol recovery service. On the other hand, there was one participant whose alcohol problems and other personal circumstances were intentionally left of out from their defence, so that they could receive as lenient as sentence as possible:

*"I knew that I was very close to a custodial sentence...I stayed away from the fact that I had been drinking up to that point. I'd stayed away from the fact that I was going through emotional turmoil and I gave the brief...that was suffering from some form of illness, like a man flu. I'd taken copious amounts of Nytol and along with alcohol on top and it had skewed my perception of what was going on. We*

*went down that line. It was a little bit dishonest on my part, but along with my hitherto credibility, my partner's position, the magistrates took it very lightly – well as lightly as they could, in my situation.”*

(Carter, M, 50, Wales, DD conviction, in recovery (alcohol))

Most participants with an alcohol problem and a drink drive conviction did believe that more support to deal with alcohol problems should be offered as part of the judicial system. Further, participants who sought help for their alcohol problems through recovery services or centres, believed that the topic of drink driving should be covered in alcohol treatment/support groups. Only one participant who attended such a service reported that drink driving was discussed as part of their recovery.

#### 8.4.7 Perceived deterrents to drink driving

Participants were asked if they were able to rewind time, what they thought may have prevented them from drink driving. Only a few participants believed that nothing would have worked, but most identified at least one thing that may have stopped them from drink driving.

##### a) Zero drink drive limit

Half of participants believed that if the drink drive limit was lowered to zero, they would have not drunk and driven. Many spoke of the uncertainty surrounding what the current drink drive limit meant, whether in Scotland or the rest of the UK. There was a common belief that one or two drinks was the maximum amount person could have without going over the limit, and many did not see the point in just having one drink. Many participants also indicated that a zero limit would send a clear message to society and leave no room for debate on the differing effects of alcohol on the body:

*“...as far as I am concerned if you've had a glass of wine, small, large or whatever then it should be illegal...the drink drive limit went down from thirty-five down to twenty-two, but it should be zero... it should in theory then negate this level of debate that a potential drink driver will have. I've had one glass...Am I still okay? Yes, I'm fine because I've had something to eat. Or it's half an hour since I've had a drink, I will be fine. So even with a twenty-two limit, which it is currently, then I just think that invites debate.”*

(Lucas, M, 48, Scotland, DD conviction, in recovery (alcohol))

However, half of participants did not support having a zero limit, or believed that the limit would never be lowered to zero. One participant believed that government would never lower the limit to zero, as this would result in less income generation from drink driving fines. Another participant who opposed the zero limit claimed to have seen research (though he could not specify where he had read this) that people who had one or two drinks are more likely to drive carefully than someone who had no alcohol.

##### b) Education on topics relating to alcohol and its wider harms

Half of participants also believed that more education on alcohol-related topics would have helped them and society in general, to avoid drink driving. Topics included the alcoholic content of drinks, how the body processes alcohol, how to interpret the drink drive limit, or how alcohol interacts with medication. Many participants also added that some form of education on alcohol and its wider harms should be a part of the theory driving test and/or provided when people had to renew their vehicle insurance.

Many participants who were in recovery from alcohol believed that if they had received help earlier, this would be prevented or minimised their drink driving. There was a common belief that society needed to be better informed of the damaging effects of alcohol, to address the problems stemming from it, such as drink driving:

*“What would have prevented me [from drink driving], well for a start, I think this whole alcohol thing, the education for me would have had to have been to see that alcohol was a poison when I was growing up. If I'd seen it was a poison, because...I knew that drugs were poison...we're told right, heroin and all of that is going to kill you right. You're not told that alcohol is going to kill you, that is not part of the education.”*

(Jasmine, F, 58, England, DD conviction)

##### c) Intervention from another person

Despite a few participants reporting that someone had tried to stop them from drink driving, several participants believed that intervention from another person would have prevented them from drink driving. It was believed that physical intervention, for e.g. taking away of one's keys, was the only thing that would have prevented drink driving in situations where a person was very drunk. Additionally, verbal intervention, for e.g. telling someone to not drink and drive, would have made them think rationally or made them feel too guilty or pressure to drink drive in situations where the person was not too intoxicated:

*“...if I'd been with someone who I knew didn't approve [of drink driving], I probably wouldn't have done it. I'd have had more of a conscience but because I was with somebody that I know regularly drinks and drives...if my children are around they would say no...they would have said it wasn't a good idea and they'd have tried to talk me out of doing it.”*

(Erin, F, 49, England, in recovery (alcohol))

Once participant reported not knowing how to intervene if they saw someone about to drink drive and believed that many people were also unaware of this, or would be too afraid to approach someone to prevent them from drink driving.

##### d) Police enforcement

Another form of intervention that was acknowledged as a deterrence was increased police presence. Many participants reported that, though they were always afraid of being caught while drink driving, they knew the chance of this was very low, due to a low police presence on the road in their areas:

*“Even in England, I mean I go out on the roads...I don't even see people being breathalysed. I don't know whether there's less police on the road, I have no idea right, but I don't ever see them okay...knowing that they might be there, they might jump out, I wouldn't drink and drive in a place where you know, you're going to lose your licence, you could go to jail...for me that's enough deterrent to go no, no.”*

(Nancy, F, 59, in recovery (alcohol))

#### e) Consumer breathalysers

A few participants, regardless of if they had an alcohol problem or not, believed a device such as a breathalyser, that showed them how much alcohol was in their system, would have prevented them from drink driving. However, a counter-argument to this was that if someone was very intoxicated, their perceptions and judgements would have been impaired, negating any potential benefits of having a breathalyser:

*“The breathalyser, I actually bought one for that reason that I would actually check that I am okay to drive, but of course when you are drunk enough you just don’t care. That just goes out of the window...When it’s left to you and if you have a real problem, it’s just, it doesn’t work that way, so it has to be something that really forces you not to drive.”*

(Megan, F, 54, England, in recovery (alcohol))

A few participants also believed that devices that physically prevented driving, such as alcohol interlocks, would have prevented them from drink driving, and would be more effective than a breathalyser, particularly in situations where someone was very drunk. One participant added that it would be cost-effective to fit interlocks into every vehicle as this would significantly reduce the number of drink driving events in the UK.

#### f) Measures specifically for people with alcohol problems

Many participants with a past alcohol problem were adamant that alcohol problems needed to be dealt with to prevent drink driving. A few believed that people with these problems should not be punished, but instead should be given the necessary support to help them deal with the underlying issues that led to their alcohol problems. However, there were a few who believed that receiving a drink driving sentence was the only way to prevent such a person from drink driving, but that this should be combined with a proven alcohol recovery programme:

*“...they should be compelled and I don’t mean suggested, they should be compelled to begin with to do 90 meetings of some sort of twelve step programme or other form of, what’s the word, recovery programme that works for them...then go back to the court to report back how they felt afterwards.”*

(Jaxon, M, 57, Scotland, in recovery (alcohol))

#### g) Other prevention methods

Other responses in relation to preventing drink driving included increasing the frequency of drink driving awareness campaigns. A few people believed that currently, these campaigns were too infrequent, with most only seeing them at Christmas time. A few people also said that current campaigns were not relatable and should include hard hitting messages about all consequences of drink driving.

One participant from England believed the drink drive limit should be lowered there to the same as Scotland:

*“...because I knew there was a lower limit in Scotland, I really did think about what I had to drink the previous evening....Probably a lot of people think Scotland’s in the UK, it’s all the same drink drive limit and ironically you can be in Carlisle under the limit and then once you’re over that border you could get banned...I find it*

*quite fascinating...that sort of scared me into sort of...change my ways and look at, look at my behaviour because I don’t want to be one of those people sort of thing.”*

(Toby, M, 42, England, in recovery (alcohol))

Another participant mentioned that there should be more companies whose business centres on getting your car home safely while you’re on a night out, e.g. Scoot, and that non-alcoholic drinks should be cheaper.

## 8.5 Discussion of interview findings

Our study aimed to better understand the experiences and perceptions of repeat drink drivers in the UK, in relation to motivations, perceived risks and deterrents. The most common drink driving circumstances were driving home at night, soon after socialising with friends or family, or driving the morning after a late or heavy drinking session. The reported consequences of drink driving included physical damage to people and property, but the most notable consequences were the emotional, mental and financial costs to the participants and their families. People chose to drink drive late at night or only over short distances, to minimise the chances of harming other people or getting caught by the police. Perceptions of feeling safe to drive and the normalisation of drink driving led to the behaviour being repeated. Drink driving was considered a stigmatised behaviour while drink drivers were viewed as dangerous, lawbreaking and selfish. Suggestions for drink driving deterrents included having a zero drink drive limit, increasing awareness of alcohol-related topics through education, intervention from another person and increasing the visibility of the police.

## 8.6 Little change in circumstances and reasons for drink driving in the UK

Our findings show that circumstances and explanations for drink driving in the UK have changed little over the past twelve years. We found that many people drove at night, after socialising with friends or family, and had intentions of using alternative transport, overnighing at someone’s house or drinking less. Similarly, Sykes et al. (2010) found that most drink driving took place late in the evening, when drinking was unplanned or when driving was unplanned.<sup>94</sup> We also found that participants drank and drove mainly short distances. Others have also found similar findings.<sup>95</sup>

We also found that participants made decisions about when or where to drive, based on the chances of them causing harm to others and getting caught by the police. This contrasts slightly with a Danish study that the strategies drink drivers took were almost expressly to avoid the police, and were not described as aiming to avoid causing an accident<sup>96</sup>

In our study, many people drank and drove because they felt fine to drive, despite reporting having had a lot to drink. Skyes et al. also reported similar findings, where participants tended to drive because they felt safe and confident in the driving capabilities.

<sup>90</sup> Sykes W, Groom C, Kelly J, Hopkin J (2010) Road Safety Research Report No.114. A qualitative Study of Drinking and Driving: Report of Findings. London: Department for Transport.

<sup>91</sup> Keatley DA, O’Donnell C and Joyce T (2020) Perceptions of drink driving legal limits in England: a qualitative investigation. *Psychology, Crime & Law*, pp.1-12.  
Collins E, Dickson N, Eynon C, Kinver A and MacLeod P (2008) *Drinking and Driving 2007: Prevalence, Decision Making and Attitudes*. Edinburgh: Scottish Government Social Research.

<sup>92</sup> Fynbo L and Järvinen M (2011) ‘The best drivers in the world’: Drink driving and risk assessment. *The British Journal of Criminology*, 51(5), pp.773-788.



### 8.6.1 Perceptions of drink driving and drink drivers remain stereotypical

Despite all participants admitting to drink driving at least once, nearly all viewed their drink driving behaviours as risky, dangerous and selfish, and many had little tolerance for other drink drivers. They also gave stereotypical views of who a drink driver was, i.e. a male that intentionally drove while highly intoxicated. This echoes similar findings from a qualitative study by Sykes et al. (2010), whose participants viewed drink driving as a serious issue and thought drink drivers were dangerous, uncaring and very drunk. We found that many of our participants did consider themselves to be a drink driver, either during the entire period of drink driving, even when they weren't physically driving, or only during the individual drink driving events. This contrasts with Sykes et al. (2010), whose participants did not identify as drink drivers.<sup>97</sup>

There was little difference between the views of people who did and did not have an alcohol and/or mental health problem in relation to drink driving. The one difference was in relation to the categorisation of drink drivers. While participants who had an alcohol and/or mental health problem also presented stereotypical views of drink drivers, they acknowledged that there was a separate category of drink drivers who genuinely needed help and tended to have more empathy for people who fell into this category.

### 8.6.2 Links between alcohol problems, mental health and drink driving

Over half of our participants reported having an alcohol problem at the time of drink driving. Although this is reflective of our recruitment strategy, a few of our participants who were not recruited via alcohol recovery/treatment groups also reported having alcohol problems. Additionally, a few participants who had joined the online drinkdriving.org forum had reported seeing many other users talking about alcohol problems. Previous research indicates that many repeat drink drivers are heavy drinkers or dependent on alcohol.<sup>98</sup>

Our findings reveal that though many people with a past alcohol problem were aware of the risks and consequences of drink driving, the need for alcohol was more salient. This resulted in drink driving circumstances where there was little to no self-control, such as driving to get more alcohol, and for a few participants, needing to drink in order to drive, or experiencing blackouts.

A fairly novel finding of this study is that 12 out of the 18 participants who reported an alcohol problem also reported a mental health problem. There is evidence that alcohol and mental health problems are linked.<sup>99</sup> In our study, these links were observed, but we cannot determine whether alcohol problems resulted in mental health problems, or vice versa. In several cases, people were already moderate or heavy drinkers, and became dependent while trying to cope with a traumatic event; this has been found elsewhere.<sup>100</sup> Yet, there were a few cases

where participants reported their mental health worsening due to their alcohol dependency. There were also a few cases in which a participant's mental health problem, such as PTSD, led to irregular bouts of heavy drinking. Other research has also found that problems such as depression and bipolar disorder were associated with alcohol use disorders.<sup>101</sup> There was also one participant in our study who had struggled with alcohol and other drug misuse along with mental health problems.

In our study, it was evident that the UK judicial system, including the drink drive rehabilitation programmes, rarely considered the underlying alcohol and/or mental health problems of participants who were convicted. There was one exception where a participant from Northern Ireland reportedly received a light sentence because the judge knew the participant had a place at a reputable alcohol treatment service. Even in this situation, the support given was not due to the judicial system. Most participants with a conviction received help for their alcohol problems elsewhere.

Similarly, a few participants dealing with post-traumatic stress problems received help elsewhere. These participants did seek help after being caught, but one participant had encountered difficulties in receiving a proper diagnosis for their complex PTSD, as there was a focus on her irregular, heavy drinking bouts instead of the underlying reasons for these. It has been noted that few people with co-occurring alcohol and mental health problems receive effective help from either alcohol or mental health services.<sup>102</sup>

Despite the lack of consideration of alcohol and/or mental health problems by the judicial system, several participants reported that their drink drive conviction prompted them to seek help.

### 8.6.3 Preventing drink driving

Overall, participants had a high awareness of legal and non-legal drink driving deterrents. The most common legal deterrent mentioned was having a zero or zero tolerance drink drive limit. The arguments for this measure centred around it being a clear message that drinking any amount of alcohol and driving would be wrong and illegal. Similar findings are reported in relation to views of the drink drive limit in England, and in relation to women's views on drink driving in Sweden and Australia.<sup>103</sup> There is evidence, mainly in relation to young drivers, that zero or zero tolerance limits can be effective in reducing drink driving and related road accidents in America and Canada, though it was suggested that police enforcement was also needed.<sup>104</sup> However, there is also evidence that zero or zero tolerance limits do not work. In Brazil, a zero tolerance limit did not result in any significant change to road mortality rates.<sup>105</sup> In Slovenia, young drivers were found to have alcohol in their system while driving, despite there being a zero tolerance policy for new drivers.<sup>106</sup>

Another legal deterrent that would reportedly prevent drink driving was increased enforcement. Several participants mentioned feeling afraid of being caught by the police

<sup>97</sup> Sykes W, Groom C, Kelly J, Hopkin J (2010) Road Safety Research Report No.114. *A qualitative Study of Drinking and Driving: Report of Findings*. London: Department for Transport.

<sup>98</sup> Sykes W, Groom C, Kelly J, Hopkin J (2010) Road Safety Research Report No.114. *A qualitative Study of Drinking and Driving: Report of Findings*. London: Department for Transport.  
Carlson RG, Sexton R, Hammar L and Reese TH (2011) Driving themselves to drink: Qualitative perspectives from "hardcore" DUI repeat offenders in Ohio. *Journal of ethnicity in substance abuse*, 10(4), pp.363-379.  
Järvinen M and Fynbo L (2011) Self-governance, control and loss of control amongst drink drivers. *International Journal of Drug Policy*, 22(6), pp.437-444.  
Lenton S, Fetherston J and Cercarelli R (2010) Recidivist drink drivers' self-reported reasons for driving whilst unlicensed – A qualitative analysis. *Accident Analysis & Prevention*, 42(2), pp.637-644.

<sup>99</sup> Institute of Alcohol Studies (2018) *Alcohol and mental health: police and practice in England*. London: Institute of Alcohol Studies.

<sup>100</sup> University of Stirling (2013) *Health First: an evidence-based alcohol strategy for the UK*. Stirling: University of Stirling. Available at: <https://www.stir.ac.uk/media/schools/management/documents/Alcoholstrategy-updated.pdf>. [Accessed August 2020]

<sup>101</sup> Institute of Alcohol Studies (2018) *Alcohol and mental health: police and practice in England*. London: Institute of Alcohol Studies.

<sup>102</sup> IAS (2018) *Alcohol and mental health: police and practice in England*. London: Institute of Alcohol Studies.

<sup>103</sup> Keatley DA, O'Donnell C and Joyce T (2020) Perceptions of drink driving legal limits in England: a qualitative investigation. *Psychology, Crime & Law*, pp.1-12.  
Watling H and Armstrong K (2015) Exploring the influences of country-level factors on mature-aged women's drink driving attitudes. *Transportation Research Part F: Traffic Psychology and Behaviour*, 30, pp.57-65.

<sup>104</sup> Chamberlain E and Solomon R (2008) Zero blood alcohol concentration limits for drivers under 21: lessons from Canada. *Injury prevention*, 14(2), pp.123-128.  
Fell JC and Voas RB (2006) The effectiveness of reducing illegal blood alcohol concentration (BAC) limits for driving: evidence for lowering the limit to .05 BAC. *Journal of safety research*, 37(3), pp.233-243.

<sup>105</sup> Volpe FM, Ladeira RM and Fantoni R (2017) Evaluating the Brazilian zero tolerance drinking and driving law: time series analyses of traffic-related mortality in three major cities. *Traffic injury prevention*, 18(4), pp.337-343.

<sup>106</sup> Calinescu T and Adminaite D (2018) *Progress in reducing drink driving in Europe*. Brussels: European Transport Safety Council.

while drink driving, and many chose to drive at times or in places where they knew their chances of getting caught were minimal. There is strong evidence that police enforcement such as random breath testing, coupled with other legal sanctions such as lower BAC limits, can reduce drink driving.<sup>107</sup>

It was apparent from our findings that several participants felt that they were not likely to be caught by the police, which contributed to the normalisation of drink driving.

Several participants also reported several non-legal deterrents that may have prevented them from drink driving. One of these was the physical or verbal intervention from another person. This intervention was perceived as peer-pressure, whereby it would ‘awaken’ people’s consciences by evoking feelings of guilt or fear of being judged. Similar findings were reported on Australian drivers’ perceptions of non-legal sanctions.<sup>108</sup>

Several participants also believed that more education about alcohol-related topics, including the effects of alcohol on the body and how to interpret the drink drive limit, would prevent them and others from drink driving. There is a lack of high-quality evidence on education to reduce drink driving, though emerging evidence from drink drive rehabilitation courses suggests that education may be effective in reducing drink driving as part of the rehabilitation process, after a person has committed the offence.<sup>25</sup> More research is needed in this area, and we welcome the Ipsos-Mori research on this area. A few participants also believed that drink driving awareness campaigns needed to be more frequent. A systematic review of mass media campaigns aimed at reducing drink driving found that these can reduce drink driving but need to be implemented in conjunction with other prevention activities such as police enforcement.<sup>109</sup> Some participants in our study also added that these awareness campaigns needed to portray various scenarios of drink driving that a range of people could relate to, not just the stereotypical target group of young men. This complements findings by Sykes et al. (2010), who found that participants did not personally identify with drink driving campaigns in the UK.<sup>110</sup> A few of our participants who experienced ‘unexpected’ consequences of drink driving such as higher car insurance premiums and the possibility of denied entry to other countries, believed that these should be given more focus in drink driving campaigns.

Our findings revealed that for many people, drink driving was a consequence of their alcohol and/or mental health problems, though most had some control over their decisions to drink and drive. This suggests that drink driving may be better tackled not through the judicial system, but through a public health lens, where the underlying causes of a person’s alcohol and/or mental health are dealt with. However, it is worth noting that several people reported their drink driving conviction acted as a catalyst for them to seek help. These findings suggest

that combining drink driving rehabilitation with specific treatment for alcohol problems may be the best approach to reducing drink driving in this group of people.<sup>111</sup>

There are examples of successes to using this combined approach. In Slovenia, repeat offenders must follow rehabilitation programmes that are divided into educational and psychosocial workshops. In Denmark, in addition to drink drive penalties, some workplaces have introduced alcohol policies, whereby employers offer rehabilitation to employees with alcohol addiction. In both Slovenia and Denmark, these measures along with strict enforcement, tough sanctions and drink driving awareness campaigns, were thought to contribute to reductions in drink driving road deaths.<sup>112</sup> These successes show that additional measures for people with alcohol problems can be effective in reducing drink driving. However, there is little evidence of effective measures for drivers with co-occurring alcohol and mental health problems. Furthermore, many of these measures are reactive, only picking up on people after they have committed an offence. There is a need for proactive measures, so that people can receive appropriate treatment or support for their problems, to help reduce future drink driving. One avenue that could be looked at is the use of GPs, NHS and other health and social care services to help to identify problems.

Finally, one type of measure that was not reported by participants was alcohol policies to reduce the overall levels of alcohol consumption in the population. Policies that regulate the alcohol market such as regulating the price of alcohol and opening hours of outlets selling alcohol, can reduce drink driving.<sup>113</sup>

#### 8.6.4 Strengths and limitations

To our knowledge, this is the first qualitative study which has explored the perceptions of drink drivers in all four nations of the UK. A strength of this study is that we used rigorous qualitative data collection and analysis methods to minimise reporting bias.

One limitation of our study is the recruitment method, specifically, recruiting through alcohol recovery or treatment services. Furthermore, we used convenience sampling. Due to the sensitive nature of the study, and a slow response rate, we publicised the study on Twitter, though tried to target the viewing audience by tagging organisations, groups or individuals who thought may be able to help us identify potential participants. These factors may have resulted in some selection bias, however, one of our remits was to focus specifically on perceptions of drivers with an alcohol problem, and our findings provide some unique insights in relation to this group and drink driving.

We offered a financial incentive to participants to take part in the study. This may have resulted in participant bias where participants gave us the answers that they thought we were looking for. However, we are fairly confident that any participant bias was minimal, given the sensitive nature of this topic, and participants’ very personal accounts of their drink driving and other circumstances.

<sup>107</sup> Calinescu T and Admaite D (2018) Progress in reducing drink driving in Europe. Brussels: European Transport Safety Council.

Ferris J, M Devaney, M Sparkes-Carroll, G Davis, for Foundation for Alcohol Research & Education (2015) A national examination of random breath testing and alcohol related traffic crash rates (2000–2012). Available at: <https://trid.trb.org/view/1354152>. [Accessed August 2020]

Harrison W, Newman S, Baldock MRJ, McLean J (2003) Drink driving enforcement issues in developing best practice. Austroads Publication No. AP-R220/03. Sydney, NSW: Austroads.

<sup>108</sup> Freeman J, Parkes A, Lewis N, Davey JD, Armstrong KA and Truelove V (2020) Past behaviours and future intentions: an examination of perceptual deterrence and alcohol consumption upon a range of drink driving events. *Accident Analysis & Prevention*, 137, p.105428.

<sup>109</sup> Public Health England (2016) The Public Health Burden of Alcohol and the Effectiveness and Cost-Effectiveness of Alcohol Control Policies: An evidence review. London: Public Health England.

Elder RW, Shults RA, Sleet DA, Nichols JL, Thompson RS, Rajab W and Task Force on Community Preventive Services (2004) Effectiveness of mass media campaigns for reducing drinking and driving and alcohol-involved crashes: a systematic review. *American journal of preventive medicine*, 27(1), pp.57–65.

<sup>110</sup> Sykes W, Groom C, Kelly J, Hopkin J (2010) Road Safety Research Report No.114. A qualitative Study of Drinking and Driving: Report of Findings. London: Department for Transport.

<sup>111</sup> Schulze H, Schumacher M, Urmeew R, Alvarez J, Bernhoft IM, de Gier HG, et al. (2012) Driving Under the Influence of Drugs, Alcohol and Medicines in Europe — findings from the DRUID project. DRUID Thematic Papers. Luxembourg: European Monitoring Centre for Drugs and Drug Addiction.

<sup>112</sup> Calinescu T and Admaite D (2018) Progress in reducing drink driving in Europe. Brussels: European Transport Safety Council.

<sup>113</sup> DHS (2008) Reducing drinking and driving in Europe. Hamm: Deutsche Hauptstelle für Suchtfragen e.V. Available at: <http://www.ias.org.uk/uploads/pdf/Drink%20driving%20docs/drinkdriving-report.pdf> [Accessed August 2020]



## 8.7. Conclusions from interviews

This qualitative study explored the experiences and perceptions of repeat drink drivers in the UK, in relation to motivations, perceived risks and deterrents. Drink driving circumstances mainly occurred when participants drove home after drinking socially with family and friends, or the morning after to go to work or run errands. Justifications for drink driving mostly included minimising the chances of participants harming other people or getting caught by the police and included driving late at night or only over short distances. Many of our participants, regardless of being caught drink driving or not, experienced behavioural, financial and emotional or mental consequences; the most salient of these were feeling guilt, shame, fear and remorse because of their drink driving behaviour. Several participants had an alcohol and/or mental health problem but did not receive help for these problems through the judicial system. Drink driving was considered a stigmatised behaviour and participants generally viewed drink drivers (including themselves) as dangerous and selfish. Participants also had little tolerance towards other drink drivers. Perceived effective deterrents included having a zero or zero tolerance drink drive limit, increased police enforcement, intervention from another person, increased education on alcohol and its wider harms, and increased frequency and relatability of drink driving awareness campaigns. There is evidence that there is a need to tackle the underlying issues that lead to alcohol and/or mental health problems. There are opportunities for health and social care systems to intervene before people with alcohol and/or mental health problems go on to drink drive, but careful consideration and coordination is needed to ensure that these people receive effective treatment or support for their problems.

## CHAPTER 9

# Reasons for drink driving





This section uses evidence primarily from studies based on interviews with, and questionnaires filled out by people who have drink driven. It is important to note the reasons they give may be post-rationalisation of behaviour or excuses.

Traffic psychology theories suggest that driving behaviour is often not a planned or well-considered behaviour but rather a product of automatic responses, habits and the actual circumstances of the situation.<sup>114</sup> Fynbo and Jarvinen (2011) classified drink drivers based on the reasoning that led them to drink. These were a) drink-driving as a non-decision behaviour, i.e. no deliberate decision to drink-drive; b) drink-driving as a strategic behaviour, i.e. decision was carefully planned to avoid getting caught; c) drink-driving and control, i.e. decision based on perceptions of feeling safe to drive; and d) drink-driving and 'normalcy' i.e. drink-driving was normal to the participant's social groups.<sup>115</sup> The evidence also suggests that while for some drink driving is a 'non-decision', others do make risk assessments based on factors such as the likelihood of being detected by the police.<sup>116</sup>

The reasons for drink driving have been classified into those which encourage drink driving and those which fail to discourage it. Factors which encourage drink driving actively contribute to and can cause a decision to drink drive: they make drink driving a more desirable option for the decision maker. Factors which fail to discourage drink driving do not in themselves cause a decision to drink drive, but they may make it more likely. For example, someone will not decide to drink drive just because they perceive there to be a low level of police enforcement, but it may contribute to the decision of someone who wants to drink drive because they feel safe to do so and have had a sudden change of circumstances.

## 9.1 Factors which encourage people to drink drive

### 9.1.1 Feeling safe to drive

One of the reasons for drink driving most clearly established in the literature is drivers feeling safe to drive in spite of their alcohol consumption. Drink drivers have been found to be routinely overconfident in their own driving skills while drunk.<sup>117</sup> This can lead to drivers feeling that they are safe to drive or believing that they are within their own definition of a safe limit.<sup>118</sup> Drink drivers may then feel that they are not behaving unsafely and are therefore unlikely to cause an accident or to attract police attention.<sup>119</sup> This behaviour is often reinforced by occasions when drink drivers have drink driven without consequence.<sup>120</sup> Some drink drivers

may drink beyond their 'safe' level, defining an 'acceptable' drink drive limit which is beyond a strictly 'safe' level but where they will still on occasion drive.<sup>121</sup>

Feeling safe to drive was commonly mentioned by those who had admitted to drink driving and were interviewed for this project. Participants noted that they often drove late at night or for short distances, therefor posing a smaller risk (particularly to others). Many also reported that they felt safe despite having several drinks, though admitted that their judgement would have been impaired by the effects of alcohol.

*"It was the early hours – this is how I justified it in my mind. It's the early hours of the morning, it's dark, there's hardly anybody on the road. If anybody is going to die, it's going to be me. It's not like I'm going to kill anybody."*

(Ruby, F, 50, England, in recovery (alcohol))

**"Carter:** *It was an imbalance of me being intoxicated, which I was, but my ability to think that I could control the situation, which was obviously misguided that time.*

**Interviewer:** *So you knew you were intoxicated, but you didn't feel drunk?*

**Carter:** *Yes absolutely.*

The subjective norms and attitudes of peers' about drink driving and 'safe limits' can also reinforce drink driving behaviour and the feeling that drivers are safe in spite of their alcohol consumption.<sup>122</sup> The importance of self-defined 'safe limits' can also be seen in offenders' definitions and attitudes towards driving. Drink driving is seen as a serious issue in theory by offenders. However, offenders view drink drivers as those who deliberately drive over the limit, cause accidents and are uncaring and very dangerous. The term is also associated with excessively drunk drivers. Offenders typically do not regard themselves as drink drivers, they do not believe they are deliberately flouting the law; they see themselves as caring, reasonably compliant with the law (at least in spirit) and, essentially, as safe.<sup>123</sup> Offenders with severe alcohol issues who are likely to drink drive repeatedly may also tend to downplay the problem and danger of drink driving to avoid personal responsibility.<sup>124</sup> A feeling amongst offenders that they remain safe to drive can be seen even with drivers who combine drugs with alcohol and are thus likely to be even more impaired. A study of those who use ecstasy and alcohol and drive in Australia found that slightly more than half of respondents felt their driving ability was quite improved, slightly improved or not impacted by their drug and alcohol consumption.<sup>125</sup> Drink drivers believing that their driving ability is not affected by alcohol and that their behaviour is safe offers a significant challenge to behaviour change, especially when the behaviour has been reinforced through personal experience of 'consequence free' drink driving. This includes both driving without crashing and driving without being stopped by the police, both of which were mentioned by drink drivers interviewed for this project.

<sup>114</sup> Sloomans, F.; Martensen, H.; Kluppels, L.; Meesmann, U. (2017). *Rehabilitation courses as alternative measure for drunk driving offenders*. European Road Safety Decision Support System.

<sup>115</sup> Jarvinen, M., and Fynbo, L. (2011). Self-governance, control and loss of control amongst drink-drivers. *International Journal of Drug Policy*, 22, 437–444.

<sup>116</sup> Beuret, K., Corbett, C., and Ward, H. (2014). *Drinking among British Women and its impact on their pedestrian and driving activities*. Social Research Associates.

<sup>117</sup> Gonzales-Iglesias, B., Gomez-Fraguela, J. A., Sobral, J. (2014). Potential Determinants of Drink Driving in Young Adults. *Traffic Injury Prevention*, 16(4), 345-352.

<sup>118</sup> Beuret, K., Corbett, C., and Ward, H. (2014). *Drinking among British Women and its impact on their pedestrian and driving activities*. Social Research Associates.

Hopkin, J., Sykes, W., Groom, C., and Kelly, J. (2010). *A Qualitative Study of Drinking and Driving: Report on the Literature Review*. Road Safety Research Report No. 113, Department for Transport.

Gonzales-Iglesias, B., Gomez-Fraguela, J. A., Sobral, J. (2014). Potential Determinants of Drink Driving in Young Adults. *Traffic Injury Prevention*, 16(4), 345-352.

<sup>119</sup> Hopkin, J., Sykes, W., Groom, C., and Kelly, J. (2010). *A Qualitative Study of Drinking and Driving: Report on the Literature Review*. Road Safety Research Report No. 113, Department for Transport.

Jarvinen, M., and Fynbo, L. (2011). Self-governance, control and loss of control amongst drink-drivers. *International Journal of Drug Policy*, 22, 437–444.

<sup>120</sup> Sykes, W., Groom, C., Kelly, J., and Hopkin, J. (2010). *'A Qualitative Study of Drinking and Driving: Report of Findings*. Road Safety Research Report No. 114.' Department for Transport

<sup>121</sup> Hopkin, J., Sykes, W., Groom, C., and Kelly, J. (2010). *A Qualitative Study of Drinking and Driving: Report on the Literature Review*. Road Safety Research Report No. 113, Department for Transport.

<sup>122</sup> Fynbo, L., and Jarvinen, M. (2011). 'The Best Drivers in the World': Drink-Driving and Risk Assessment. *The British Journal of Criminology*, 51(5), 773–788.

<sup>123</sup> Sykes, W., Groom, C., Kelly, J., and Hopkin, J. (2010). *'A Qualitative Study of Drinking and Driving: Report of Findings*. Road Safety Research Report No. 114.' Department for Transport

<sup>124</sup> Goldenbeld, C., Blom, M. & Houwing, S. (2016). Zware alcoholovertreeders in het verkeer. Omvang van het probleem en kenmerken van de overtreeders. R-2016-12. SWOV, Den Haag.

<sup>125</sup> Matthew, A., et al. (2009). Factors associated with driving under the influence of alcohol and drugs among an Australian sample of regular ecstasy users. *Drug and Alcohol Dependence*, 100(1), 24-31.

### 9.1.2 Planning and changes of circumstance

Unexpected events, and changes of circumstance, are often given as reasons for drink driving. On these occasions drink driving is seen as something that ‘happens’ to someone rather than something they made a conscious decision to do<sup>126</sup> It is important to note that this evidence, largely coming from interviews with and questionnaires filled out by offenders, may be post-rationalisation of behaviour or excuses. However, decisions about driving are often not planned or well-considered behaviours, but a product of automatic responses, habits and circumstance.<sup>127</sup>

Studies which interviewed offenders have found that drink driving events often occur after ‘casual’ evenings drinking rather than ‘serious’ nights. In some cases, this was drinking at home with the intention to settle in for the evening before an unexpected event led them to drive. Similarly, unplanned drinking in other people’s homes often resulted in drink driving. Moreover, offenders often did not associate drink driving risk with domestic settings, instead associating risks with drinking in pubs, bars etc. As a result, they did not view their own behaviour – driving after consuming alcohol at home – as drink driving.<sup>128</sup> Women may be particularly likely to drink drive as the result of a change of circumstances. A survey conducted by Beuret, Corbett and Ward suggested that unexpected family demands, such as the need to collect teenagers or children or drive home partners who were clearly over the limit, led to drink driving. Indeed, a study of Australian women also found that women were drink driving on occasions to protect partners who were over the drink drive limit. The evidence also suggests that while some say they would only drink and drive in an emergency, when further examined, these emergencies include a wide range of unexpected circumstances well beyond matters of life and death.<sup>129</sup>

Interviews conducted for this report with people who had admitted to drink driving also suggest that changes in circumstance are a key factor in people’s decision to drink drive. Participants reported that they had planned on spending the night at another person’s house but decided to drive to their own home after an argument broke out. Other participants mentioned that they had planned to use alternative transport, but for various reasons this was no longer possible.

Interviews with offenders suggest that some drink drive incidents are a consequence of impulsive decisions which reflect impaired judgement. In these situations drink drivers often felt that they were not in control of the circumstances which undermined their plans and lead to ‘unplanned’ drink driving.<sup>130</sup> It is in this context that many offenders consider their drink driving to be unintentional and justified or explained by the specific circumstances which were beyond their control. These ‘unplanned’ drink drive incidents tend to be short, local journeys which are well known to drivers.<sup>131</sup> This may further contribute to impulsive decisions being made to drink drive, as the journeys feel safe and drink driving ‘not a big deal’ in the situation.

<sup>126</sup> Sykes, W., Groom, C., Kelly, J., and Hopkin, J. (2010). ‘A Qualitative Study of Drinking and Driving: Report of Findings. Road Safety Research Report No. 114.’ Department for Transport

<sup>127</sup> Sloomans, F.; Martensen, H.; Kluppels, L.; Meesmann, U. (2017). *Rehabilitation courses as alternative measure for drunk driving offenders*. European Road Safety Decision Support System.

<sup>128</sup> Sykes, W., Groom, C., Kelly, J., and Hopkin, J. (2010). ‘A Qualitative Study of Drinking and Driving: Report of Findings. Road Safety Research Report No. 114.’ Department for Transport

<sup>129</sup> Beuret, K., Corbett, C., and Ward, H. (2014). *Drinking among British Women and its impact on their pedestrian and driving activities*. Social Research Associates.

<sup>130</sup> Morrison, L., Begg, D. J., Langley, J. D. (2002). Personal and situational influences on drink driving and sober driving among a cohort of young adults. *Injury Prevention*, 8(1), 111-115.

<sup>131</sup> Sykes, W., Groom, C., Kelly, J., and Hopkin, J. (2010). ‘A Qualitative Study of Drinking and Driving: Report of Findings. Road Safety Research Report No. 114.’ Department for Transport

### 9.1.3 Alternative transport

Interviews with drink drive offenders suggest that a lack of alternative transport provision and attachment to cars contributes to drink driving. Many drink drivers feel dependent and attached to cars, both practically and psychologically.<sup>132</sup> They are reluctant to leave their cars after a night out and view other forms of transport negatively.<sup>133</sup> For many of these drink drivers, driving is the default behaviour, and conflict therefore arises in situations where drinking is also the default.<sup>134</sup> The cost of taxis is often a deterrent while there is a lack of awareness and occasional snobbery about public transport options.<sup>135</sup> Public transport can also be viewed as inconvenient or unsafe, particularly when getting off it. The freedom, independence and personal security offered by cars - particularly for women at night - act as motivators to drive, even after drinking.<sup>136</sup>

### 9.1.4 Drinking behaviour

Research on reasons for drink driving is largely framed around why people drive having drunk. However, it is also important to consider why people drink when they know they will drive. Research suggests that some offenders felt expected or required to drink in certain social situations, believing that ‘not keeping up’ can be regarded as socially unacceptable or a sign of weakness.<sup>137</sup> For other offenders, certain social situations and beginning to drink created a ‘loss of control’ where they feel they lose the ability to self-govern.<sup>138</sup> These offenders focus on the ethical aspects of drink driving and living up to standards of responsible self-governance. Many emphasised their attempts to act as responsibly as possible in the circumstances (driving ‘safer’ routes or avoiding drinking spirits for example). They emphasise that there were struggles with addiction or that alcohol or drug use triggered a process where self-governance is impossible.

## 9.2 Factors which fail to discourage the decision to drink drive

### 9.2.1 Perceptions of police enforcement

The perceived likelihood of being caught when drink driving also influences drink driving decisions. Amongst many drink drivers, the likelihood of being caught is perceived to be very low and as a result, the consequences of being caught are not a significant disincentive.<sup>139</sup> While there are certain areas or times of year where the likelihood of being caught is perceived to be higher - near licenced venues and around Christmas and New Year’s Eve for example - there are also journeys where the risk is believed to be very low. This includes short journeys, journeys on back roads and journeys on roads away from popular licensed venues.<sup>140</sup> Other

<sup>132</sup> Sykes, W., Groom, C., Kelly, J., and Hopkin, J. (2010). ‘A Qualitative Study of Drinking and Driving: Report of Findings. Road Safety Research Report No. 114.’ Department for Transport

<sup>133</sup> Morrison, L., Begg, D. J., Langley, J. D. (2002). Personal and situational influences on drink driving and sober driving among a cohort of young adults. *Injury Prevention*, 8(1), 111-115.

<sup>134</sup> Sykes, W., Groom, C., Kelly, J., and Hopkin, J. (2010). ‘A Qualitative Study of Drinking and Driving: Report of Findings. Road Safety Research Report No. 114.’ Department for Transport

<sup>135</sup> Beuret, K., Corbett, C., and Ward, H. (2014). *Drinking among British Women and its impact on their pedestrian and driving activities*. Social Research Associates.

<sup>136</sup> Sykes, W., Groom, C., Kelly, J., and Hopkin, J. (2010). ‘A Qualitative Study of Drinking and Driving: Report of Findings. Road Safety Research Report No. 114.’ Department for Transport

<sup>137</sup> Beuret, K., Corbett, C., and Ward, H. (2014). *Drinking among British Women and its impact on their pedestrian and driving activities*. Social Research Associates.

<sup>138</sup> Sykes, W., Groom, C., Kelly, J., and Hopkin, J. (2010). ‘A Qualitative Study of Drinking and Driving: Report of Findings. Road Safety Research Report No. 114.’ Department for Transport

<sup>139</sup> Jarvinen, M., and Fynbo, L. (2011). Self-governance, control and loss of control amongst drink-drivers. *International Journal of Drug Policy*, 22, 437-444.

<sup>140</sup> Hopkin, J., Sykes, W., Groom, C., and Kelly, J. (2010). *A Qualitative Study of Drinking and Driving: Report on the Literature Review*. Road Safety Research Report No. 113, Department for Transport.

<sup>140</sup> Sykes, W., Groom, C., Kelly, J., and Hopkin, J. (2010). ‘A Qualitative Study of Drinking and Driving: Report of Findings. Road Safety Research Report No. 114.’ Department for Transport

studies have found that drink drivers will drive more slowly or carefully because they believe it will mean the police do not stop them. Furthermore, studies have suggested that drivers' decisions on whether or not to drink drive are based more on the risk of detection by police than the risk of collision. Both the literature on drink driving and interviews conducted with drink drivers for this report suggest that once a person has drink driven and not been stopped by the police, this behaviour becomes normalised.<sup>141</sup> While a perceived low likelihood of being caught by police is not a direct reason for drink driving – no one will drink drive purely because they won't be caught doing it – the evidence suggests it contributes to decisions to drink drive.

### 9.2.2 Unsure on limit

Some studies have found that limited knowledge of the drink drive limit and confusion on how to measure consumption, as well as how consumption is related to blood alcohol level, may lead to drink driving.<sup>142</sup> This confusion and lack of knowledge may lead to people driving when they believe they are likely to be under the limit. This is particularly the case if they feel that their driving ability has not been impaired and therefore they are not dangerous, will not attract the attention of the police and are complying with the spirit of the law, even if they are unsure if they are complying with its letter.

### 9.2.3 Passengers

The likelihood of drink driving can also be affected by others in the vehicle. Passengers in a vehicle can either increase or decrease the likelihood of drink driving depending on their attitude. The presence of passengers in the vehicle can enhance the sense of responsibility of the driver and reduce the likelihood of drink driving.<sup>143</sup> While the presence of others who disapprove of drink driving may reduce the likelihood of drink driving,<sup>144</sup> the presence of others who encourage drink driving, or reinforce the attitude that drivers can be safe after a few drinks, can increase the likelihood of drink driving.<sup>145</sup> Passenger behaviour can thus encourage the decision to drink drive or fail to discourage the decision. People who admitted to drink driving and were interviewed for this report largely recorded driving by themselves. This was often because they were primarily concerned about harming others and had little consideration for their own safety. A small number of participants did admit to occasionally driving with their children, friends or partners.

## 9.3 Conclusion

The literature on the reasons for an individual's decision to drink drive offers a variety of interrelated reasons for drink driving. Any single decision to drink drive is likely to be influenced by many of the reasons above: for example, feeling safe to drive, believing police will not be present so you will not be stopped and thinking that there are no other available transport options as desirable or affordable as driving. For some, drink drive decisions are instinctive

or impulsive rather than considered, conscious or planned. For drink drivers, biases and preconceptions lead to an instinctive decision rather than a considered one. Unfortunately, it is not possible to say quantitatively how much each factor contributes to drink driving at a national level. All are important and should be considered when designing interventions aimed at reducing drink driving.

<sup>141</sup> Jarvinen, M., and Fynbo, L. (2011). *Self-governance, control and loss of control amongst drink-drivers*. *International Journal of Drug Policy*, 22, 437–444.

<sup>142</sup> Hopkin, J., Sykes, W., Groom, C., and Kelly, J. (2010). *A Qualitative Study of Drinking and Driving: Report on the Literature Review*. Road Safety Research Report No. 113, Department for Transport.

<sup>143</sup> Kaplan, S., and Prato, C. (2007). Impact of BAC limit reduction on different population segments: A Poisson fixed effect analysis. *Accident Analysis and Prevention*, 39(6), 1146–1154.

<sup>144</sup> Morrison, L., Begg, D. J., Langley, J. D. (2002). Personal and situational influences on drink driving and sober driving among a cohort of young adults. *Injury Prevention*, 8(1), 111–115.

<sup>145</sup> Fynbo, L., and Jarvinen, M. (2011). 'The Best Drivers in the World': Drink-Driving and Risk Assessment. *The British Journal of Criminology*, 51(5), 773–788.



## CHAPTER 10

# Potential interventions: weighing the evidence



This section reviews the evidence for the effectiveness of different types of interventions to reduce drink driving. Evidence used in this chapter comes from a review of the academic and grey literature on drink drive interventions, interviews with experts conducted by PACTS, project advisory panel meetings, and the research conducted by the University of Stirling and University of Dundee.

Interventions aimed at reducing drink driving can be diverse and wide ranging because of the multitude of factors which can lead to drink drive deaths, ranging from tackling an individual's alcohol issues, through vehicle design, to police enforcement strategies. This highlights the need for a coordinated approach to drink driving spanning multiple sectors and the remits of several government departments. While this represents an institutional and political challenge, it also highlights the potential resources and expertise to tackle over 200 deaths a year.

Interventions aimed at reducing drink driving have been categorised as preventative and responsive:

- Preventative interventions aim to stop drink driving before it happens,
- Responsive interventions aim to reduce the likelihood of reoffending after an individual has been caught drink driving.

### 10.1 Preventative interventions

#### 10.1.1 Policing, enforcement and sentencing

##### *Perceived levels of enforcement*

There is clear evidence that an individual's perception of the likelihood of being caught by the police influences their decision to drink drive. While people's perception of the likelihood of being caught is not necessarily the same as the actual likelihood, an individual's beliefs about the consequence of drink driving and being caught for drink driving is based on actual practice in their area.<sup>146</sup> Not being caught by police leads to the normalisation of drink driving behaviour, and encourages drivers to make the decision to drink drive in the future. There is also strong evidence that increased enforcement reduces both drink driving and the number of collisions involving alcohol.<sup>147</sup> Publicising enforcement can also increase its effectiveness and further reduce drink driving.<sup>148</sup> These impacts of enforcement on behaviour can be explained by a reconceptualised model of deterrence theory which is widely used in relation to preventing drink-driving. It postulates that when the perceived certainty and severity of direct (legal) and indirect (non-legal) punishment is high, people are less likely to drink-drive.<sup>149</sup>

Interviews conducted with drink drivers for this report also suggested that enforcement would reduce drink driving. Participants acknowledged that increased presence of the police would have decreased the likelihood of them drink driving. However, many participants also stated that they knew the chance of being caught was low because of a low police presence.

<sup>146</sup> Sloan, F., Platt, A., and Chepke, L. (2011). *Deterring Rearrests for Drinking and Driving*. Duke University.

<sup>147</sup> Erke, A., Goldenbeld, C., and Vaa, T. (2009). 'The effects of drink-driving checkpoints on crashes – A meta-analysis. *Accident Analysis and Prevention*, 41(5); 914-923

Schulze, H., Schumacher, M., Urmeew, R., Auerbach, K. (2012). Final Report: *Work performed, main results and recommendations*. DRUID.

North, P. (2010). *Report of the Review of Drink and Drug Driving Law*. Department for Transport.

<sup>148</sup> National Academies of Sciences, Engineering, and Medicine. (2018). *Getting to zero alcohol-impaired driving fatalities: A comprehensive approach to a persistent problem*. Washington, DC: The National Academies Press.

<sup>149</sup> Freeman, J. et al. (2006). The self-reported impact of legal and non-legal sanctions on a group of recidivist drink drivers. *Transportation Research Part F: Traffic Psychology and Behaviour*, 9(1), 53-64.

*“Even in England, I mean I go out on the roads...I don’t even see people being breathalysed. I don’t know whether there’s less police on the road, I have no idea right, but I don’t ever see them okay...knowing that they might be there, they might jump out, I wouldn’t drink and drive in a place where you know, you’re going to lose your licence, you could go to jail...for me that’s enough deterrent to go no, no.”*

(Nancy, F, 59, in recovery (alcohol))

Furthermore, participants reported that drink driving and not being caught reinforced their behaviour and their feeling safe to drive when they were drunk.

### **Mandatory breath testing**

One enforcement method, not available to police in Great Britain (though now available to police in Northern Ireland) is mandatory breath testing often described as “random” breath testing. Mandatory testing would give police the powers to conduct a breath test on any driver. Currently, despite having unlimited powers to stop vehicles, police can conduct a breath test only if they suspect the driver has been drinking, has been involved in an accident or has committed a moving traffic offence. While these powers allow the police to test for drink driving in most cases when they would wish to, it does not make it possible to convey the simple message that whenever you drive you may be subject to a breath test even if you are driving carefully to avoid attracting police attention.<sup>150</sup>

The phrase ‘random breath testing’ is sometimes misunderstood. It normally involves testing carried out at locations selected on the basis of intelligence, not randomly, and every passing driver has the same random probability of being stopped and tested. It is therefore not a random process in the statistical sense. It is used in Northern Ireland, much of Europe, Australia and elsewhere. A modified version – mandatory alcohol testing – takes place in the Republic of Ireland.

Of the European Transport Safety Council (ETSC) PIN countries (the 27 EU member states, Israel, Norway, Serbia Switzerland and the UK) targeted mandatory/random breath testing is legal in all except Great Britain, Germany and Malta.<sup>151</sup> Targeted mandatory/random breath testing involves breath testing focused on times and places with a high likelihood of drink driving such as near pubs, on Friday nights etc. There is strong evidence of the effectiveness of mandatory/random breath testing, particularly when well publicised and when targeted.<sup>152</sup> Mandatory/ random breath testing can be effective at reducing alcohol impaired driving, alcohol related crashes and associated fatal and non-fatal injuries even when it is undertaken only for a relatively short period of time.<sup>153</sup>

<sup>150</sup> North, P. (2010). *Report of the Review of Drink and Drug Driving Law*. Department for Transport.

<sup>151</sup> Calinescu, T., and Adminaite, D. (2018). *Progress in reducing drink driving in Europe*. ETSC.

<sup>152</sup> North, P. (2010). *Report of the Review of Drink and Drug Driving Law*. Department for Transport. National Academies of Sciences, Engineering, and Medicine. (2018). *Getting to zero alcohol-impaired driving fatalities: A comprehensive approach to a persistent problem*. Washington, DC: The National Academies Press.

Calinescu, T., and Adminaite, D. (2018). *Progress in reducing drink driving in Europe*. ETSC.

Schulze, H., Schumacher, M., Urmeew, R., Auerbach, K. (2012). *Final Report: Work performed, main results and recommendations*. DRUID.

Kim, J. H., Wong, A., Goggins, W., Lau, J., and Griffiths, W. (2013). Drink driving in Hong Kong: the competing effects of random breath testing and alcohol tax reductions. *Addiction*, 108(7), 1217-1228

<sup>153</sup> North, P. (2010). *Report of the Review of Drink and Drug Driving Law*. Department for Transport.

There is evidence of public support for random breath testing in the UK. In 2010 a poll of AA members found that 79% were in favour of the police being able to breathalyse a driver at any time.<sup>154</sup> Furthermore, even amongst a 2018 poll of drivers who drink alcohol at least once a week, almost 30% supported random testing being brought in and the increasing the frequency of breath testing by police.<sup>151</sup> To introduce mandatory breath testing in Great Britain, Section 6 of the Road Traffic Act 1988 would need to be amended to provide a general and unrestricted power to require anyone who is driving a motor vehicle to cooperate with a preliminary breath test.

**Mandatory breath testing has been legal in Northern Ireland since 2016 and the passing of the Road Traffic (Amendment) Act (Northern Ireland) 2016. The impact of this change on drink driving has not been assessed, though the number of breath tests conducted has increased significantly since mandatory breath testing was allowed (27,446 tests in 2015 up to 43,712 in 2017).**

The findings of various studies indicate that both mandatory breath testing checkpoints and selective breath testing checkpoints are interventions that are effective in reducing alcohol impaired driving, alcohol related crashes and associated fatal and non-fatal injuries particularly when implemented as part of a concentrated effort and even over a relatively short period of time.<sup>155</sup>

Concerns have been raised over the introduction of mandatory breath testing in Great Britain because a lack of resources may mean that the police are unable to conduct large numbers of breath tests. Mandatory breath testing, particularly when police set up checkpoints and breath test a high percentage of motorists who pass, is resource intensive and roads policing has been significantly cut since 2010. However, introducing mandatory breath testing led to an increase in breath tests conducted in Northern Ireland in 2017 following several years of decline. Secondly, PACTS believes that even limited amounts of mandatory breath testing at checkpoints, undertaken for example during Christmas drink drive campaigns combined with effective messaging would reduce drink driving. Finally, a lack of available resources is a stronger argument for increasing the resources available to roads policing units that it is against giving police the power to conduct mandatory breath testing. In Australia, breath tests at checkpoints are conducted by police cadets, rather than police officers. Police officers then re-test and process anyone who is over the limit. A similar system could be considered in Great Britain to help reduce the police resources that would be needed to conduct mandatory breath testing. Mass testing, with roadside checkpoints where police had the powers to pull over any driver, but not to obligate a driver to take a breath tests unless they suspected they had consumed alcohol, has been previously conducted in Great Britain but is no longer routinely used by police forces, in part because of the resources required.

If mandatory breath testing were to be introduced in the UK, close monitoring should be introduced to ensure that this power is being used fairly and appropriately. As well as being a vital in monitoring the fair use of mandatory testing, collecting data on the profile, circumstances and results of mandatory tests would be a useful data source for drink drive researchers. This information is already collected by police when they conduct a breath test, therefore continuing it would not represent a significant burden. An initial trial period with mandatory breath testing only continued if it is being used appropriately should be considered by Ministers.

<sup>154</sup> North, P. (2010). *Report of the Review of Drink and Drug Driving Law*. Department for Transport.

<sup>155</sup> North, P. (2010). *Report of the Review of Drink and Drug Driving Law*. Department for Transport.



There are forms of technology-based enforcement which can be effective. In Sweden Alco Gates were first trialled at a port where many large ferries dock. Drivers leaving the port had to pass a checkpoint where they had to blow into a non-contact breath testing (screening) device. If the reading was under the legal limit the gate would be opened. Following the initial success of the project in combatting drink driving, the Swedish government has passed legislation allowing Alco Gates to be rolled out more widely.<sup>156</sup> Similar devices could be installed at other entry points to the road network such as service stations or distribution warehouses. Using devices such as Alco Gates would likely require a law change in the UK as drivers would be tested without a reason currently set out in law (suspicion of drink driving, involvement in a collision etc.). Systems would also need to be designed to avoid possible delays at ports, etc.

#### **Drink drive enforcement campaigns**

As well as routine enforcement, UK police forces often run drink driving campaigns, with heightened enforcement/enforcement focus on drink driving alongside media campaigns, including social media, local radio and materials in pubs. Generally, these campaigns are based around the National Police Chiefs' Council (NPCC) drink driving campaigns which take place in the summer and around Christmas. These campaigns are not routinely evaluated by police forces, or local authorities who often run information campaigns alongside the heightened enforcement.

**One exception is the Isle of Man where the drink drive campaign is jointly evaluated by the Isle of Man Constabulary and Department of Health and Social Care who monitor public awareness and behaviour through surveys, alcohol related hospital admission, drink drive arrests and night-bus use.** Since 2016, public awareness of the campaign has gone up alongside drink driving arrests and night bus use while alcohol related hospital admissions have decreased. Survey respondents also indicate some changed behaviour such as making alternative arrangements to get home or deciding not to drive the morning after drinking.

Drink driving is also addressed in many police 'fatal four/five' activities.<sup>157</sup> For example, the Surround-A-Town events run by Safer Essex Roads Partnership, where officers are deployed around a targeted area to stop drivers for drink and drug driving, seat belt wearing, mobile phone use and speeding.

Enforcement of drink driving laws is one of the most effective ways of reducing drink driving. *The downward trend in the level of drink drive enforcement due to a decline in Roads Policing Officers should be reversed. Police should be given the powers to conduct mandatory alcohol testing. Police forces should target enforcement on the basis of the profile of drink drivers, either nationally or preferably in their police force area; for example, increasing drink drive enforcement in the evenings and on weekends. Breath tests should be conducted on all those suspected of drug driving, even if they have failed a drug wipe test.*

#### **Mobile evidential breath testing**

After the police conduct a breath test at the roadside and get a positive result, the driver must be taken back to a police station for an evidential test. Since the Serious Organised Crime and Police Act (2005), police have been permitted to use mobile evidential breath testing instruments (MEBTI). However, no such device has yet received type approval. PACTS is currently running a competition with a grant from the DfT to encourage the development

of MEBTI. Such equipment would allow police to conduct evidential breath tests at locations other than police stations and offer flexibility for the police. With current equipment, even moving an evidential breathalyser within the police station requires it to be decommissioned and then recommissioned where it has been moved to. MEBTI may also make it less likely that a driver tests positive at the roadside but their BAC falls below the legal limit in the time taken to get to a police station, be processed and tested. MEBTI could also be used routinely at large events, or at the entrance/exit of ports or service stations as an Alco Gate system.

*The police should start to plan how they will use the mobile evidential breath testing instruments ("roadside tests") which may be available in 2022.*

Experts have advised that MEBTI may give rise to an increased duty of care towards drink drivers at the roadside, because the evidential testing will take place there, rather than in a police station.

*The police, in collaboration with other agencies should consider this duty of care, including what appropriate procedures will be.*

#### **Tackling drivers who combine drink and drug**

Driving having consumed both alcohol and other drugs is significantly more dangerous than driving with an equivalent amount of alcohol or drugs.<sup>158</sup> This is because the interaction of alcohol and other drugs can be significantly more impairing than in isolation.<sup>159</sup> This can be true for both illicit and medicinal drugs. Drivers could also have low levels of drugs and alcohol in their system and therefore be below the drink and drug driving limit, but still be significantly impaired. Although the courts could consider this to be an aggravating circumstance, drivers generally do not receive more severe sentences for driving with both alcohol and drugs in their system and are usually prosecuted, and convicted, for one offence only. As a result, police officers will often not conduct a breath test or drug wipe if a driver has tested positive for the other test. This means there are poorer data on the level of drink and drug driving in the population, the full danger a driver posed is not considered in court and there is no additional penalty or deterrent.

*Magistrates should be made aware of the increased danger posed by drivers who have consumed both drink and drugs. More severe sentences, such as inclusion on a High Risk Offender Scheme, should be given to those who are both drink and drug driving.*

#### **Multiple risky behaviours**

Drink driving is associated with other higher risk driving behaviour, such as driving at night, adverse influence by passengers and driving without a seat belt. The 2019 PACTS report 'Seat Belts: The forgotten road safety priority' found that a driver was impaired by alcohol in 23% of KSIs where a seat belt was not worn, a rate 3.6 times higher than would be expected.<sup>160</sup> The associations between drink driving and other risky behaviour, including drug driving, highlight the impact on casualties that reducing drink driving could have and the value of targeting enforcement on these particularly risky drivers. The combined Fatal Four campaigns are helpful in this respect.

<sup>158</sup> Dubois S, Mullen N, Weaver B, Bédard M. (2015). The combined effects of alcohol and cannabis on driving: Impact on crash risk. *Forensic Sci Int.* 248(1), 94-100

<sup>159</sup> Australian Drug Federation (2007). *Drugs and Driving in Australia*. [http://www.onlinelibraryaddictions.stir.ac.uk/files/2017/07/Drugs\\_and\\_Driving\\_in\\_Australia\\_fullreport.pdf](http://www.onlinelibraryaddictions.stir.ac.uk/files/2017/07/Drugs_and_Driving_in_Australia_fullreport.pdf)  
Sewell, R. A., Poling, J., & Sofuoglu, M. (2009). The effect of cannabis compared with alcohol on driving. *The American journal on addictions*, 18(3), 185-193.

<sup>160</sup> Webster, E., and Norbury, F. (2019) 'Seat Belts: The forgotten road safety priority'. PACTS



*The heightened risks of fatal and serious casualties from multiple risky behaviours, such as failing to wear a seat belt while drink driving, should be recognised and addressed in enforcement activity.*

### Licence revocation on health grounds

There can be long periods between a person being charged with drink driving and appearing in court and being prosecuted for drink driving. In this period, a drink driver is still able to drive and some may continue to drink drive. The long periods are generally due to court availability and overstretched legal services rather than as a result of issues around drink driving specifically.

One campaign run by police forces aimed at reducing the risk of people drink driving between arrest and conviction is Operation Revoke. Operation Revoke is now run by a number of police forces across the UK. It aims to

- Reduce and prevent organised crime by removing the ability of prolific offenders to drive a vehicle lawfully.
- Reduce the risk of serious collisions through drivers having medical episodes and posing risks to themselves and others thereby increasing community confidence.

‘Medical conditions’ include those that have substance use issues – typically drugs though on occasion Operation Revoke has targeted those who have alcohol problems. Operation Revoke is often used to prevent people from driving after they have been arrested, but before they appear in court. This is in part because of the time taken to receive lab results for some offences, drug driving in particular. When someone has their licence revoked they need undergo a medical investigation by the DVLA to regain it (as they would if they had they informed the DVLA themselves of a medical condition which made them unfit to drive). Operation Revoke has also been used where a person’s poor mental health has made them unfit to drive.

This may also be relevant for drink driving because of the high levels of mental health issues amongst drink drivers. Interviews with police officers who have been involved with Operation Revoke across the country suggest it has been an effective way of preventing dangerous drivers from using the roads. Police forces have also been able to work effectively with courts and the DVLA on Operation Revoke. While it does not address the underlying issue of long periods between arrest and conviction for drink driving, Operation Revoke has proven to be an effective way of preventing dangerous, and often vulnerable drivers, from using the roads. All UK police forces should be encouraged to use Operation Revoke where appropriate.

### Policing during coronavirus

Some police forces reported detecting increases in drink driving during coronavirus, both in discussions with PACTS and in local newspaper reports.<sup>161</sup> However, it is not clear if this is because of increases in drink driving, greater resources being available for roads policing, drink drivers being more visible on quieter roads or a combination of the above.

#### 15.1.2 Media campaigns

Media campaigns have been one of the most common interventions aimed at reducing drink driving in the UK. The first television advertisement aimed at reducing drink driving ran in 1964 telling the public ‘don’t ask a man to drink and drive’. The Department for Transport has run advertisements across all media aimed at reducing drink driving for many years, most

<sup>161</sup> <https://www.walesonline.co.uk/news/uk-news/warning-over-surge-drink-driving-19452197>,  
<https://www.harboroughmail.co.uk/news/crime/more-130-drivers-arrested-suspected-drink-driving-or-drug-driving-leicestershire-throughout-december-despite-covid-19-crackdown-3089442>

recently the 2018/19 ‘Mates Matter’ campaign. Broadly, media advertising has focused on three key factors aimed at influencing drink drive behaviour. These are:

- attitudes – one’s understanding of the risks of drink driving (including legal risks);
- norms – one’s perceptions of what others think of drink driving; and
- the drink driver image – how one’s image of drink driver compares with self-image.<sup>162</sup>

Media campaigns are typically assessed in terms of recognition, recall and impacts on intentions. Evidence of their effectiveness on actual behaviour or casualties, particularly for media campaigns in isolation, is mixed. Assessing the impacts of communications campaigns alone is difficult as it is hard to disentangle their impact from other interventions. Various studies have found that media campaigns alone are not effective at reducing alcohol-related fatal crashes.<sup>163, 164, 165, 166, 167, 168</sup>

Interviews with drink drivers have suggested that the conventional focus of media campaigns on young men drinking in pubs and bars means that some, particularly women, do not identify with the messages, characters or situations featured in campaigns.<sup>169</sup> Interviews with alcohol experts support this finding from the literature. Experts suggest that messaging on alcohol use more generally has focused predominantly on younger men and has had little to no impact on older generations and women, perhaps contributing to the shifting patterns of drinking behaviour (see Alcohol Consumption in the UK). Typically, these campaigns are aimed at younger men as casualty data suggests they are the group most likely to drink drive. Alternatives to this style of advert include the Police Service of Northern Ireland/Drink Wise Age Well campaign, which focuses on older drinkers and presents information on drink driving in a plain, factual manner, though this campaign has not been assessed.<sup>170</sup>

**There is evidence which suggests that media campaigns - in combination with other measures - can reduce the number of drink drive casualties. Media campaigns combined with enforcement can lead to a reduction in drink drive casualties.<sup>171</sup> For example, the BOB designated driver campaign run in both Belgium and the Netherlands, combined adverts which aimed to introduce and model a social norm, with increased enforcement, and was found to reduce drink driving.<sup>172</sup> It was also found that enforcement using**

<sup>162</sup> Bullmore, J., and Watkins, S. (2014) *Department for Transport: how thirty years of drink drive communications saved almost 2,000 lives*. DfT

<sup>163</sup> Foxcroft, D. R., and A. Tsertsvadze. 2012. Cochrane review: Universal school-based prevention programs for alcohol misuse in young people. *Evidence-Based Child Health: A Cochrane Review Journal* 7(2):450–575

<sup>164</sup> Elder, R. W., J. L. Nichols, R. A. Shults, D. A. Sleet, L. C. Barrios, and R. Compton. 2005. Effectiveness of school-based programs for reducing drinking and driving and riding with drinking driver.

<sup>165</sup> Yadav, R.-P., and M. Kobayashi. 2015. A systematic review: Effectiveness of mass media campaigns for reducing alcohol-impaired driving and alcohol-related crashes. *BMC Public Health* 15(1):1.

<sup>166</sup> National Academies of Sciences, Engineering, and Medicine. (2018). *Getting to zero alcohol-impaired driving fatalities: A comprehensive approach to a persistent problem*. Washington, DC: The National Academies Press.

<sup>167</sup> Mann, E., et al. (2001). ‘The effects of introducing or lowering legal per se blood alcohol limits for driving: an international review’. *Accident Analysis & Prevention*, 33(5), 569-583.

<sup>168</sup> Shope, J. T., M. R. Elliott, T. E. Raghunathan, and P. F. Waller. 2001. Long-term follow-up of a high school alcohol misuse prevention program’s effect on students’ subsequent driving. *Alcoholism: Clinical and Experimental Research* 25(3):403–410.

<sup>169</sup> Sykes, W., Groom, C., Kelly, J., and Hopkin, J. (2010). ‘A Qualitative Study of Drinking and Driving: Report of Findings. Road Safety Research Report No. 114.’ Department for Transport  
Beuret, K., Corbett, C., and Ward, H. (2014). *Drinking among British Women and its impact on their pedestrian and driving activities*. Social Research Associates.

<sup>170</sup> <https://www.youtube.com/watch?v=DeCqmf0opoM>

<sup>171</sup> Road Safety Observatory. (Undated). *Drink Driving*. Road Safety Observatory.  
Elder, R. W., R. A. Shults, D. A. Sleet, J. L. Nichols, R. S. Thompson, W. Rajab, and Community Preventive Services Task Force. 2004. Effectiveness of mass media campaigns for reducing drinking and driving and alcohol-involved crashes: A systematic review. *American Journal of Preventive Medicine* 27(1):57–65.

<sup>172</sup> SWOV (2018). Driving under the influence of alcohol. SWOV Fact sheet, June 2018, SWOV, The Hague.

### drink drive checkpoints have their effectiveness enhanced when media campaigns promote awareness of the initiative.<sup>173</sup>

On alcohol consumption more generally, systematic reviews of media campaigns in the field of public health have found that they can be effective in promoting meaningful changes in health behaviour at the population level when implemented with community level interventions. It has also been suggested that media and educational programmes may not modify behaviour but can increase the visibility of alcohol related issues on the public agenda.<sup>174</sup>

One notable outlier from the literature on the effectiveness of media campaigns is a study conducted by the advertising agency Leo Burnett for the Department for Transport. Using a model based on the proportion of total KSIs represented by drink drive deaths and serious injuries they suggested that media campaigns in the UK between 1979 and 2009 had ‘saved almost 2,000 lives and prevented over 10,000 serious injuries.’ The model accounts for drink drive enforcement, drink drive legislation, economic factors, weather conditions and drink drive communications. It does not account for broader societal attitude changes towards alcohol and drink driving (or attributes them exclusively to the factors above).<sup>175</sup> This report represents an outlier to the rest of the literature and was not peer reviewed. The majority of the evidence on media campaigns suggests that they are not effective at reducing drink drive casualties on their own, though in combination with other interventions, particularly enforcement, they can be effective.

Drink drivers interviewed for this report felt that media campaigns could have some impact but were too infrequent – most saw them only at Christmas – and some felt that the current campaigns were not relatable.

*Media campaigns designed to amplify drivers’ perception of levels and effectiveness of enforcement activity should be run alongside enforcement campaigns. These should reflect the diversity of drink drivers and situations in which people drink drive. Media campaigns, including those using social media etc, should be assessed in relation to their impact on reducing drink driving and casualties.*

#### 10.1.3 Blood alcohol limit reductions

The drink drive limit in England, Wales and Northern Ireland is currently 0.08g of alcohol in 100ml of blood. No other part of Europe has a limit above 0.05g/100ml. The limit of 0.08g/100ml was set in Great Britain in 1967 and over the last 30 years the question of whether the limit should be lower has been increasingly debated.<sup>176</sup> The limit was set at 0.08g/100ml mainly because of the combination of these facts

- 0.08g/100ml was the level above which the Grand Rapids evidence indicated that average risk of collision involvement was roughly doubled;
- 0.08 was in the range of levels then being considered or implemented in other countries;
- it was plausible that public and parliamentary acceptance could be gained – partly on the basis of advice that most people could have three small drinks without exceeding 0.08; and

<sup>173</sup> Bergen, G., A. Pitan, S. Qu, R. A. Shults, S. K. Chattopadhyay, R. W. Elder, D. A. Sleet, H. L. Coleman, R. P. Compton, J. L. Nichols, J. M. Clymer, and W. B. Calvert. 2014. Publicized sobriety checkpoint programs: A community guide systematic review. *American Journal of Preventive Medicine* 46(5):529–539.

<sup>174</sup> National Academies of Sciences, Engineering, and Medicine. (2018). *Getting to zero alcohol-impaired driving fatalities: A comprehensive approach to a persistent problem*. Washington, DC: The National Academies Press.

<sup>175</sup> Bullmore, J., and Watkins, S. (2014) *Department for Transport: how thirty years of drink drive communications saved almost 2,000 lives*. DfT

<sup>176</sup> Allsop, R. (2015). *Saving Lives by Lowering the Legal Drink-Drive Limit*. PACTS/RACFoundation

- 0.08 was the level at which the Grand Rapids evidence, in the form in which it was published, enabled increased risk to be established with the conventional statistical 95% level of confidence against a background of genuine difference of opinion as to whether the risk was increased or decreased.<sup>177</sup>

Since the 1960s the evidence has evolved considerably and it is clear that drivers are impaired at levels below 0.08mg/100ml. In the late 1990s the government was minded to lower the drink drive limit and consulted on the issue. The response was on balance supportive of lowering the limit, but the government stated an intention to deal with the matter in the context of European harmonisation which might have led to a Directive requiring the limit be lowered. However, the European Commission adopted instead a non-binding Recommendation that Member States should set their blood alcohol content limits at or below 0.05g/100ml.<sup>178</sup> In 2010 the North Report recommended lowering the drink drive limit. The government did not implement this recommendation as it preferred to target enforcement on the most dangerous drink drivers.<sup>179</sup> In December 2014, the Scottish government cut the drink drive limit from 80 mg of alcohol per 100ml of blood to 50mg of alcohol in 100ml of blood. In 2018 the Northern Ireland Assembly passed legislation lowering the drink driving limit to 50mg of alcohol in 100ml of blood. However, this has not yet come into force because of technical issues with breathalysers being able to accurately measure the 22mg/100ml limit for professional and novice drivers the legislation also introduced.

#### Global experience

There is a wide range of international evidence of reductions in the BAC limit reducing drink driving and alcohol-impaired road deaths. An international meta-analysis looking at the effects of lowering BAC found that lowering the BAC resulted in a 5.0% decline in non-fatal alcohol-related crashes, that lowering the BAC to 0.08g/100ml led to a 9.2% decline in fatal alcohol-related crashes, and lowering the BAC to 0.05g/100ml or below led to an 11.1% decline in fatal alcohol-related crashes.<sup>180</sup> **Reductions in the blood alcohol limit have also been shown to reduce fatal collisions in Australia,<sup>181</sup> Austria,<sup>182</sup> Brazil,<sup>183</sup> France,<sup>184</sup> Japan,<sup>185</sup> Serbia,<sup>186</sup> Sweden,<sup>187</sup> Switzerland and the USA.<sup>188</sup> Lowering the blood alcohol limit is particularly effective at reducing the number of alcohol impaired road deaths.<sup>189</sup>**

<sup>177</sup> Allsop, R. (2015). *Saving Lives by Lowering the Legal Drink-Drive Limit*. PACTS/RACFoundation

<sup>179</sup> The Government’s Response to the Reports by Sir Peter North CBE QC and the Transport Select Committee on Drink and Drug Driving

<sup>180</sup> Fell, J., and Scherer, M. (2017). Estimation of the Potential Effectiveness of Lowering the Blood Alcohol Concentration (BAC) Limit for Driving from .08 to .05 grams per deciliter in the United States. *Alcohol Clin Exp Res*, 41(12): 2128–2139

<sup>181</sup> Homel R. Drink-driving law enforcement and the legal blood alcohol limit in New South Wales. *Accid Anal Prev* 1994;26(2):147–55.

<sup>182</sup> Bartl G, Esberger R. Effects of lowering the legal BAC limit in Austria. In: Laurell H, Schlyter F, editors. *Proceedings of the Fifteenth International Conference on Alcohol, Drugs and Traffic Safety*; 2000 May 21–26; Stockholm. Ann Arbor, MI: ICADTS, 2000.

<sup>183</sup> Andreuccetti G, Carvalho HB, Cherpitel CJ, Ye Y, Ponce JC, Kahn T, et al. Reducing the legal blood alcohol concentration limit for driving in developing countries: a time for change? Results and implications derived from a time-series analysis (2001–10) conducted in Brazil. *Addiction* 2011;106(12):2124–31.

<sup>184</sup> Mercier-Guyon C. Lowering the BAC limit to 0.05: results of the French experience. *Transportation Research Board 77th Annual Meeting*; Washington, DC; Jan 11–15, 1998

<sup>185</sup> Nagata, T., Hemenway, D., and Perry, M. (2006). ‘The Effectiveness of a New Law to Reduce Alcohol-impaired Driving in Japan. *JMAJ*, 49(11): 365–369.

<sup>186</sup> Zivkovic V, Nikolic S, Lukic V, Zivadinovic N, Babic D. The effects of a new traffic safety law in the Republic of Serbia on driving under the influence of alcohol. *Accident Anal Prev* 2013; 53: 161–65

<sup>187</sup> Norström T, Laurell H. Effects of lowering the legal BAC-limit in Sweden. In: Mercier-Guyon C, editor. *Proceedings of the Fourteenth International Conference on Alcohol, Drugs and Traffic Safety*; 1997 Sep 21–26; Annecy, France. Annecy: CERMT, 1997.

<sup>188</sup> Hingson R, Heeren T, Winter M. Lowering state legal blood alcohol limits to 0.08%: the effect on fatal motor vehicle crashes. *Am J Public Health* 1996;86(9):1297–9.

<sup>189</sup> Kaplan, S., and Prato, C. (2007). Impact of BAC limit reduction on different population segments: A Poisson fixed effect analysis. *Accident Analysis and Prevention*, 39(6), 1146–1154.

Changes to the blood alcohol limit have not had this effect in all contexts. An analysis of the limit change in Norway found no significant reduction in a number of proxies for drink driving (single-vehicle night-time and weekend personal-injury and fatal crashes) despite survey data suggesting drink driving has decreased. Similar results were found in Denmark.<sup>190</sup> In a differences-in-differences analysis of data from 15 European countries, Albalade found that a BAC limit of 0.05 or lower was associated with a 4.5% reduction in road fatality rates with population denominators, and a 7.4% reduction per distance driven denominators. However, the effects of 0.05 BAC limits were not found to be statistically significant across the entire population unless accompanied by specific enforcement activities, including random checks on the road.<sup>191</sup>

Albalade found that a two year lag is usually necessary to see the positive influence of BAC changes. Establishing the cause of this lag requires further research. There are examples where BAC reductions on their own have led to a decrease in drink drive fatalities by up to 26.7% despite police not changing their drink drive related activities and the number of arrests remaining static.<sup>192</sup>

'Zero limits', typically set at a BAC of 0.02 due to technical issues with detecting alcohol below this level, have been set in Norway, Sweden, the Czech Republic, Estonia, Poland, Hungary, Romania and Slovakia. There has been less evaluation of the impact of zero limits than of a general reduction in limit. Evaluations have found that a zero limit contributed to reductions in drink driving in Norway and Estonia<sup>193</sup> A zero limit also contributed to a clear understanding of the drink drive limit and reductions in drink driving in the Czech Republic, and studies have found that it has contributed to Sweden's strong record on drink driving.<sup>194</sup> One of the main advantages of a zero limit is that it offers clarity to the public that no amount of drinking before driving is acceptable. It may also help those who have alcohol issues or who struggle to control their drinking, to avoid drink driving.

There is evidence, mainly in relation to young drivers, that zero or zero tolerance limits can be effective in reducing drink-driving and related road accidents in America and Canada, though it was suggested that police enforcement was also needed.<sup>195</sup>

Half of those who admitted to drink driving and were interviewed for this report believed that if the drink drive limit was lowered to zero, they would not have drunk and driven. Many spoke of uncertainty surrounding what the current drink drive limit meant. Several participants also mentioned the belief that you could drink one or two drinks before being over the limit but did not see the point of just having one drink. Participants also felt that a zero limit would send a clear message to society and leave no room for debate on the differing effects of alcohol on the body:

*"...as far as I am concerned if you've had a glass of wine, small, large or whatever then it should be illegal...the drink drive limit went down from thirty-five down to twenty-two,[the breath alcohol equivalent of the Scottish limit pre and post 2014] but it should be zero... it should in theory then negate this level of debate that a potential drink driver will have. I've had one glass...Am I still okay? Yes, I'm fine because I've had something to eat. Or it's half an hour since I've had a drink, I will be fine. So even with a twenty-two limit, which it is currently, then I just think that invites debate."*

(Lucas, M, 48, Scotland, DD conviction, in recovery (alcohol))

A zero limit may also help those who struggle to control their drinking after they have started to drink by offering a strong reason to avoid drinking or help to resist peer pressure to drink at all. A zero limit also has the advantage of emphasising the clear message that it is not safe to drink having consumed any alcohol. Overall, there is strong evidence that reductions in drink driving, particularly when combined with enhanced enforcement reduces drink driving, and reduces drink driving casualties.

## UK

In 2010, the North Report recommended a reduction of the drink drive limit in the UK to 50mg of alcohol per 100ml of blood, citing estimates that in the first year post-implementation between four and 168 deaths would be avoided.

Lowering the drink drive limit from 80 to 50mg/ml would reduce deaths through moderation of those currently drink driving in three categories:

- those with BACS below 50 and thus already below the new limit but who would reduce their drinking to feel confident of remaining under the new limit;
- those with BACs between 50 and 80 and who would wish to comply with the new limit as they were with the old; and
- those with BACs somewhat above the existing limit but who were intending to comply with it and would still intend to comply with the new limit.<sup>196</sup>

**In 2015, Professor Richard Allsop estimated that, had the drink drive limit been lowered to 50 mg/ml in 2010, around 25 deaths would be avoided each year and 95 serious injuries prevented each year** (these numbers are lower than previous equivalent calculations, such as in the North Report, due to falls in casualties involving drink driving before 2010).<sup>197</sup>

## Scotland

In December 2014, the Scottish government cut the drink drive limit from 80 mg of alcohol per 100ml of blood to 50mg of alcohol in 100ml of blood. Early evaluations have found that this change was not associated with a reduction in road traffic accidents, serious or fatal road traffic accidents or single-vehicle night-time collisions.<sup>198</sup> There are a number of possible explanations for the unexpected lack of impact. Firstly, the majority of drink drive collisions may be caused by people who continue to ignore the law change or people who previously

<sup>190</sup> Assum, T. (2010). Reduction of the blood alcohol concentration limit in Norway—Effects on knowledge, behavior and accidents. *Accident Analysis & Prevention*, 42(6); 1523-1530

Bernhoft, I., and Behrendorff, I. (2003). Effect of lowering the alcohol limit in Denmark. *Accident Analysis & Prevention*, 35(4); 515-525

<sup>191</sup> Albalade D. (2008) Lowering blood alcohol content levels to save lives: the European experience. *J Policy Anal Manag*; 27: 20–39.

<sup>192</sup> Nagata, T., Hemenway, D., and Perry, M. (2006). 'The Effectiveness of a New Law to Reduce Alcohol-impaired Driving in Japan. *JMAJ*, 49(11): 365-369.

<sup>193</sup> Assum, T. (2010). Reduction of the blood alcohol concentration limit in Norway—Effects on knowledge, behavior and accidents. *Accident Analysis & Prevention*, 42(6); 1523-1530

Calinescu, T., and Admaite, D. (2018). *Progress in reducing drink driving in Europe*. ETSC.

<sup>194</sup> Podda, F. (2012). *Drink Driving: Towards Zero Tolerance*. ETSC

<sup>195</sup> Chamberlain, E., and R. Solomon. 2002. The case for a 0.05% criminal law blood alcohol concentration limit for driving. *Injury Prevention* 8(Suppl 3):iii–1.

Fell, J. C., and R. B. Voas. 2006. Mothers Against Drunk Driving (MADD): The first 25 years. *Traffic Injury Prevention* 7(3):195–212.

<sup>196</sup> Allsop, R. (2015). *Saving Lives by Lowering the Legal Drink-Drive Limit*. PACTS, RAC Foundation.

<sup>197</sup> Allsop, R. (2015). *Saving Lives by Lowering the Legal Drink-Drive Limit*. PACTS, RAC Foundation.

<sup>198</sup> Cooper, B., Gehrsitz, M., and McIntyre, S. (2019). *Drink, Death and Driving: Do BAC Limit Reductions Improve Road Safety?* No. 18-12. Department of Economics University of Strathclyde Glasgow.

Haghpahanan, H., Lewsey, J., Mackay, D., McIntosh, E., Pell, J., Jones, A., Fitzgerald, N., and Robinson, M. (2019). An evaluation of the effects of lowering blood alcohol concentration limits for drivers on the rates of road traffic accidents and alcohol consumption: a natural experiment. *Lancet*, 393: 321–29.



used to drink when between 0.8 and 0.6 BAC have changed their behaviours are responsible for only a small fraction of drink drive collisions. Secondly, the larger effect seen for other BAC reductions may be difficult to achieve where road safety has generally improved, and drink driving is less socially acceptable. Thirdly, unlike BAC reductions in many other countries, the change was not supported with an increase of enforcement or penalties and the initial investment in public education and media campaigns was not maintained beyond 2014. Indeed, some researchers have suggested that when there is a fall in drink drive deaths after BAC reductions is in fact due to general deterrence and increases in enforcement.<sup>199</sup> Finally, some studies have suggested that a two year lag is sometimes necessary before the positive effects of a BAC change can be seen, this period had not elapsed before the study of the effect of the limit change in Scotland began.<sup>200</sup> It has been suggested that the reduction in drink drive limit in Scotland was associated with an increase in drug driving deaths with the number of drugs-only road deaths doubling from ten to 21 in the year after the limit change. However, this study was based on a small sample size of just 89 driver fatalities in a one year period.<sup>201</sup> An evaluation of the impact of the Scottish changes on the bar trade and drinking practices found that while there were some adaptations, such as fewer people drinking after work, there was not a long term financial impact on businesses with many adapting by for example, improving their range of no/low-alcohol drinks and food.<sup>202</sup>

#### Lower limits for young and novice drivers

Lower drink drive limits could be introduced for young or novice drivers. Young drivers tend to have a higher rate of drink drive collisions and deaths, even in contexts where drink driving is higher amongst other age groups. Twenty-two European countries currently apply a lower BAC for novice drivers. Zero tolerance laws, which set the BAC level at 0.0-0.02, are in place across the USA for drivers under the age of 21. Studies of these laws have shown that they are effective at reducing the number of incidences of drink driving and drink driving related casualties.<sup>203</sup>

Evidence from the introduction of lower limits for novice drivers in Europe has shown that they lead to a reduction of around 15% in alcohol related collisions within the target.<sup>204</sup> The North Report recommended considering a lower (20 mg) limit for young and novice drivers if the anticipated casualty reductions from a 50mg/ml limit did not materialise. A lower limit for young and novice drivers is often part of broader measures included in a graduated driver licensing scheme, as shown in the 2017 PACTS/ETSC report Reducing Casualties Involving Young Drivers and Riders in Europe.<sup>206</sup>

*The drink drive limit in England and Wales should be reduced to 0.5 (as in Scotland and in most other European countries). It should be reduced to “zero” (0.2) for professional drivers and for young and novice drivers.*

<sup>199</sup> Mann, E., et al. (2001). 'The effects of introducing or lowering legal per se blood alcohol limits for driving: an international review'. *Accident Analysis & Prevention*, 33(5), 569-583.

<sup>200</sup> Albalade D. (2008) Lowering blood alcohol content levels to save lives: the European experience. *J Policy Anal Manag*; 27: 20–39.

<sup>201</sup> Hamnett, H. J., and Pousen, H. (2018). The effect of lowering the legal drink-drive limit on the toxicological findings in driver fatalities: a comparison of two jurisdictions. *Journal of Forensic Sciences*, 63(5), 1457-1465.

<sup>202</sup> Sumpter et al. (2020). How did a lower drink-drive limit affect bar trade and drinking practices? A qualitative study of how alcohol retailers experienced a change in policy. *Drug and Alcohol Review*. 39(1), 170-179

<sup>203</sup> Fell, J., and Scherer, M. (2017). Estimation of the Potential Effectiveness of Lowering the Blood Alcohol Concentration (BAC) Limit for Driving from .08 to .05 grams per deciliter in the United States. *Alcohol Clin Exp Res*, 41(12): 2128–2139

National Academies of Sciences, Engineering, and Medicine. (2018). *Getting to zero alcohol-impaired driving fatalities: A comprehensive approach to a persistent problem*. Washington, DC: The National Academies Press.

<sup>204</sup> Schulze, H., Schumacher, M., Urmeew, R., Auerbach, K. (2012). *Final Report: Work performed, main results and recommendations*. DRUID.

<sup>205</sup> North, P. (2010). Report of the Review of Drink and Drug Driving Law. Department for Transport.

<sup>206</sup> Atchison, L. (2017). *Reducing Casualties Involving Young Drivers and Riders in Europe*. ETSC/PACTS

*The governments of the UK should share their experience of the reduction of the drink drive limits in the four nations.*

#### 10.1.4 Fleet safety

Interviews with vehicle fleet managers and discussion with drink driving experts suggests that, in recent years, large fleets have developed stronger drink drive policies with more regular breath testing. This appears to be expanding, though progress is not universal. Large fleet operators should still be encouraged to develop, implement and prioritise strong drink drive strategies. Drink drive policies are less common in smaller fleets and in the grey fleet (drivers who use their own cars for business purposes). An effective drink drive policy should include regular education and testing (with alcohol interlocks or breathalysers/drug wipes) with a “zero” (0.2) BAC limit.

An important part of vehicle fleet safety, relevant to all companies, is having good alcohol policies and providing support for those with alcohol issues. Challenging cultures of workplace drinking has been identified as a key part in the significant progress made in reducing drink driving in Denmark. Denmark introduced no-alcohol policies in the workplace and employees were also offered leave to help support people with alcohol problems.<sup>207</sup> Developing these policies is particularly important for companies with large grey fleets, where drink driving policies are less common.

*Companies, and others with responsibility for those who drive for work, should develop strong drink drive policies, including education, testing and enforcement. This should include smaller fleets, “grey fleets” and “gig” workers.*

#### 10.1.5 Alternative transport provision

Providing alternative means of transport may be an effective way of reducing drink driving. Alternative transport provision can include better public transport provision or increased availability of taxis or private hires (such as Uber and Gett). Evidence on the effectiveness of these schemes is still emerging but results are broadly positive.<sup>208</sup> A study of the introduction of light rail in Phoenix Arizona found that increased use by students was significantly associated with decreased odds of driving while impaired. Similarly, later opening times of the Washington DC Metro saw impaired driving decline by 7% per additional hour of metro service.<sup>209</sup>

Four studies have been carried out into the entry of the private hire company Uber into a city. The evidence is mixed, with two finding positive effects in reducing drink driving, and two finding no effect.<sup>210</sup> This difference may be due to differences in public transport provision in each city. As well as providing transport alternatives, interventions should aim to remove reasons given for not using public transport such as safety concerns and ‘snobbishness’ around the use of public transport.<sup>211</sup>

Some drink drivers interviewed for this project also suggested that alternative transport provision, including companies which drive your car home safely when you are drinking, could play more of a role in reducing drink driving.

<sup>207</sup> Calinescu, T., and Adminaite, D. (2018). *Progress in reducing drink driving in Europe*. ETSC.

<sup>208</sup> Chen, T., and Jou, R. (2018). Estimating factors of individual and regional characteristics affecting the drink driving recidivism. *Accident Analysis & Prevention*, 119(1), 16-22.

<sup>209</sup> Broyles, J. (2014). *Drinking and driving and public transportation: A test of the routine activity framework*. Thesis. Tempe: Arizona State University

<sup>210</sup> National Academies of Sciences, Engineering, and Medicine. (2018). *Getting to zero alcohol-impaired driving fatalities: A comprehensive approach to a persistent problem*. Washington, DC: The National Academies Press.

<sup>211</sup> Sykes, W., Groom, C., Kelly, J., and Hopkin, J. (2010). ‘A Qualitative Study of Drinking and Driving: Report of Findings. Road Safety Research Report No. 114.’ Department for Transport

The Isle of Man Department of Health and Social Care has worked alongside the Isle of Man Constabulary and Bus Vannin to run #DrinkSafeIOM since 2017, this campaign includes a 'night owl' bus service, drink driving enforcement and information campaigns. This campaign has led to increased use of the night bus service and surveys suggest that more people have made the choice to use alternative transport rather than drive after drinking.

Alternative transport provision is likely to be more challenging to provide in rural areas. However, even if only focused on urban areas, where drink driving is highest in the UK (see Section 5.10), alternative transport may be able to reduce drink driving.

The significant decrease in public transport use during the coronavirus pandemic (bus use for example was more 50% lower in November 2020 than before the pandemic)<sup>212</sup> poses a challenge for the road safety profession. Public attitudes towards public transport also changed during the pandemic. The RAC Report on Motoring found that 57% of people perceived access to a car as more important now than before the coronavirus pandemic. Furthermore, only 43% of respondents agreed they would use their cars less if there was better public transport, a fall from 57% in 2019, and the lowest figure since 2002.<sup>213</sup> It is not known to what extent these changes are temporary or longer term.

Alternative transport provision appears to have potential to reduce drink driving, particularly in urban areas. Pilots and studies of this intervention in the UK would be useful. *The benefits and cost-effectiveness of alternative transport provision, such as night-time public transport or taxis/private hire entry, on drink driving in the UK should be investigated.*

### 10.1.6 Informing DVLA

The DVLA states there is no single definition of alcohol misuse or alcohol dependence due to the many variables within each of the conditions. The Assessing Fitness to Drive, a guide for medical practitioners offers a number of factors which can be considered as associated with alcohol misuse or dependence. The World Health Organisation's classifications of F10.1 and F10.2 (mental and behavioural disorders due to use of alcohol) are also relevant to these conditions.

An individual who has alcohol misuse confirmed by medical enquiry and/or evidence of unexplained abnormal blood markers, must not drive and must notify DVLA. Their licence will be refused or revoked until they can show a minimum of six months controlled drinking (within the Government guidelines) or abstinence and normalised blood parameters. Lorry and bus drivers need to show they have complied with the criteria for one year<sup>214</sup> **In 2019, 2354 people had their licence revoked or refused due to alcohol misuse and a further 5354 had it revoked/refused for alcohol dependency.**<sup>215</sup> It is not known whether these people self-reported or were reported to the DVLA.

The General Medical Council (GMC) advises that doctors should ask for the patient's consent to disclose information for the protection of others unless the information is required by law or it is not safe, appropriate or practicable to do so. Where it is not practicable or appropriate to seek consent and in exceptional cases where a patient refuses consent, the GMC states

that disclosing personal information may be justified in the public interest, if failure to do so may expose others to a risk of death or serious harm. Unless it is not safe or practicable to do so, a doctor should inform the patient of their intention to disclose personal information. The GMC advises that when deciding whether the public interest in disclosing information outweighs the patient's and public interests in keeping information confidential doctors should consider:

- the potential harm or distress to the patient arising from the disclosure;
- the potential harm to trust in doctors generally;
- the potential harm to others;
- the potential benefits to an individual or to society arising from the release of the information;
- the nature of the information to be disclosed; and
- whether the harms can be avoided or benefits gained without breaching the patient's privacy or what the minimum intrusion is.<sup>216</sup>

The GMC summary on the process of dealing with a patient who may not be fit to drive is 'if you become aware that a patient is continuing to drive when they may not be fit to do so, you should make every reasonable effort to persuade them to stop. If you do not manage to persuade the patient to stop driving, or you discover that they are continuing to drive against your advice, you should consider whether the patient's refusal to stop driving leaves others exposed to a risk of death or serious harm. If you believe that it does, you should contact the DVLA or DVA promptly and disclose any relevant medical information, in confidence, to the medical adviser.'<sup>217</sup>

In spite of the guidance from the DVLA and GMC, a 2015 study of doctors and those with alcohol dependence suggested that knowledge of DVLA guidance was lacking. A survey of 246 people with known alcohol dependence found that none were aware of advice on driving given by medical practitioners and none had self-reported, despite 71% having seen their GP with an alcohol problem and 56% having been admitted to hospital with an alcohol problems. In a survey of doctors attending a Royal College of Physicians symposium or visiting a Royal College of Physicians website 73% of those attending the symposium and 63% of those visiting the website answered a question on DVLA regulations about alcohol dependence incorrectly. In Scotland in 2011, over 20,000 people had alcohol dependence and over 1 million had alcohol abuse, yet only 2,548 people with alcohol problems were reported to the DVLA. The study estimated that there are likely to be over 150,000 licence holders with alcohol dependence in Scotland and a further 700,000 with harmful or hazardous use of alcohol.<sup>218</sup> Equivalent data are not available for the rest of the UK. Of those who admitted to drink driving and were interviewed for this report, just one stated that they were advised by their GP or another medical professional to report their alcohol problem to the DVLA. The DVLA Senior Doctor and policy advisors have met with the GMC to raise awareness of the medical standards laid out in DVLA guidance. This engagement should continue, and the GMC and other professional bodies should take action to ensure knowledge of this guidance reaches practitioners. As well as GPs, those working in alcohol treatment services may be in a position where it would be appropriate for them to contact the DVLA about fitness to drive. It is unclear if treatment services do report service users to the DVLA or what guidance

<sup>212</sup> DfT. (2020). *Transport use during the coronavirus (COVID-19) pandemic*. DfT

<sup>213</sup> RAC. (2020). *RAC Report on Motoring*. RAC

<sup>214</sup> DVLA Guidance on Alcohol and Licence <https://www.gov.uk/guidance/drug-or-alcohol-misuse-or-dependence-assessing-fitness-to-drive>

<sup>215</sup> Data supplied to PACTS by DVLA.

<sup>216</sup> General Medical Council. (Undated). *Confidentiality: patients' fitness to drive and reporting concerns to the DVLA or DVA*

<sup>217</sup> General Medical Council. (Undated). *Confidentiality: patients' fitness to drive and reporting concerns to the DVLA or DVA*

<sup>218</sup> Collier, A., Watts, M., Ghosh, S., Rice, P., and Dewhurst, N. (2015). Alcohol dependence and driving: knowledge of DVLA regulations. *British Journal of Psychology Bulletin*, 39(1), 35-38.

is issued. Greater clarity is needed to enable treatment providers to make the best decisions for those with alcohol issues and public safety.

*Awareness of guidance for medical professionals (and others) and the duty to inform the DVLA of a patient's alcohol issues should be raised.*

### 10.1.7 Alcohol supply reduction

The vast majority of interventions aimed at combatting drink driving focus on reducing the likelihood of someone driving after the have drunk. Comparatively few interventions are aimed at reducing drinking before driving and the evidence of their effect on drink driving is less substantial than for other initiatives. Nevertheless, there is evidence of the effectiveness of supply side policies at reducing drink driving in some contexts. There is strong evidence that in the US alcohol taxes have reduced both alcohol impaired driving and drink drive fatalities.<sup>219</sup> An earlier (1997) US study suggested that a ban on broadcast alcohol advertising could avoid between 2,000 and 3,000 of the 15,000 annual drink drive deaths per year.<sup>220</sup> Denmark has also successfully reduced drink driving in part by introduction alcohol reduction with no-alcohol policies and cultures across both the public and private sector as well as campaigns focusing on serving non-alcohol drinks at social events. In Denmark, alcohol rehabilitation is also routinely offered to employees.<sup>221</sup> These studies are not sufficient to conclude that supply-side policies would definitely be effective at reducing drink driving in the UK, but they suggest that a link may exist and demonstrate the need for further research. More broadly, research has demonstrated the impact of supply side policies on reducing the harm caused by alcohol more generally. The Government's 2012 Alcohol Strategy identified several effective ways to reduce the harm caused by alcohol including: increasing the price of alcohol; banning multi-buy promotions; improving the early identification and treatment of those with alcohol problems; and addressing alcohol-related crime and disorder.<sup>222</sup> More research is needed on the impact of public health initiatives on drink driving in the UK, focusing for example on the introduction of minimum unit pricing in Scotland.

Reducing drink driving is unlikely to be the reason supply side policies are introduced because of their much broader public health impact. However, there is some evidence that they lead to reductions in drink driving. *The impact on drink driving of public health interventions aimed at reducing alcohol harms should be monitored. Potential reductions in drink driving should be included in discussion of policies aimed at reducing alcohol harm.*

### 10.1.8 Night-time economy

Reforms and initiatives which target the night-time economy may also be able to contribute to reductions in drink driving. Changes to alcohol trading policies, particularly reducing the hours of alcohol sales may reduce drink driving. Disallowing extension of the hours of alcohol sales can be expected to prevent rises in alcohol related harms while decreasing hours of sale

at on-premises alcohol outlets can be expected to reduce alcohol related harms.<sup>223</sup> Evidence directly linking limiting alcohol hours of sales and drink driving is less clear than for other alcohol-related harms, though there is some evidence of a relationship. The North Report recommended that the drinks, hospitality and night-time industries should promote measures which encourage those driving to abstain from drinking.<sup>224</sup> This could include designated driver programmes, where designated drivers are given free non-alcohol drinks, or displaying media which highlight drink drive enforcement or the risks of drink driving. Several councils, of varying sizes, run designated driver campaigns, though their impact on drink driving has not been assessed. Interventions run at a council level have generally focused on reducing the level of drunkenness in the night-time economy more generally. For example, the 'Drink Less, Enjoy More' programme, initially run in Liverpool before being extended to towns and cities across the UK, aims to prevent intoxicated people being served more alcohol by engaging with bars, pubs and clubs and highlighting and enforcing the existing law. These programmes have been assessed for their impact on general alcohol harms and found to be successful, though their impact on drink driving has not been assessed.

## 10.2 Responsive interventions

### 10.2.1 Rehabilitation programmes

A drink drive rehabilitation course is currently offered to many of those in Great Britain who plead guilty to a drink drive offence and are banned from driving for 12 months or more. The course can cost up to £250. Having taken a course, the offenders driving ban is usually reduced by a quarter. A similar scheme is run in Northern Ireland, though at lower cost (up to £160). The course is taken in person and in groups, though some have been completed virtually during the coronavirus pandemic. It takes places over 16 hours, typically on three days spread over three weeks. The course has two units, one on *understanding* the impact of alcohol use in relation to driving and one on *changing* alcohol use in relation to driving. The overall purpose of the course is 'to support [participants] to take responsibility for their actions, recognise where they have acted inappropriately, and recognise that they can and should behave differently in compliance with driving standards, road traffic law and for general health benefits'.<sup>225</sup> The course encourages offenders to set SMART (specific, measurable, achievable, relevant and timely) goals for change, understand the triggers for drink driving and develop strategies to deal with these trigger situations. Currently, offenders are offered a choice of course providers and choose at court which course to attend.

The effectiveness of the drink drive rehabilitation course was first assessed by the Transport Research Laboratory (TRL) during a trial period where the course was offered in some areas of the UK but not others. TRL found that the course successfully reduced reoffending with the reoffending rate of those who did not attend the course being almost three times higher than the reoffending rate of those who did attend it 3 years after taking the course.<sup>226</sup> Monitoring of the course was carried out 2003 and 2007 and it was found to continue to be effective. Non-attendees were 2.15 times more likely to reoffend within three years of conviction. The effect of the drink drive rehabilitation course on reoffending can be seen in Figure 19. Attendance of the course was particularly effective at reducing the reoffending rate of men, younger offenders and those with a previous motoring conviction. However, older offenders and women (as well as those of higher social status) were more likely to choose to attend a course. Course attendees were also more likely to have been involved in a collision and

<sup>219</sup> Wagenaar, A. C., A. L. Tobler, and K. A. Komro. 2010. Effects of alcohol tax and price policies on morbidity and mortality: A systematic review. *American Journal of Public Health* 100(11):2270–2278.

Elder, R. W., B. Lawrence, A. Ferguson, T. S. Naimi, R. D. Brewer, S. K. Chattopadhyay, T. L. Toomey, J. E. Fielding, and Community Preventive Services Task Force. 2010. The effectiveness of tax policy interventions for reducing excessive alcohol consumption

<sup>220</sup> Saffer, H. 1997. Alcohol advertising and motor vehicle fatalities. *Review of Economics and Statistics* 79(3):431–442.

<sup>221</sup> Calinescu, T., and Adinaite, D. (2018). *Progress in reducing drink driving in Europe*. ETSC.

<sup>222</sup> Drummond, C., McBride, O., Fear, N., and Fuller, E. 'Alcohol Dependence' in No author. (2016). *Adult Psychiatric Morbidity Survey: Survey of Mental Health and Wellbeing, England, 2014*.

<sup>223</sup> Hahn, R. et al. (2010). Effectiveness of Policies Restricting Hours of Alcohol Sales in Preventing Excessive Alcohol Consumption and Related Harms. *American Journal of Preventative Medicine* 39(6), 590 – 604

Sanchez-Ramirez, D. C., and Voaklander, D. (2018). The impact of policies regulating alcohol trading hours and days on specific alcohol-related harms: a systematic review. *Injury Prevention*, 24(1), 94-100.

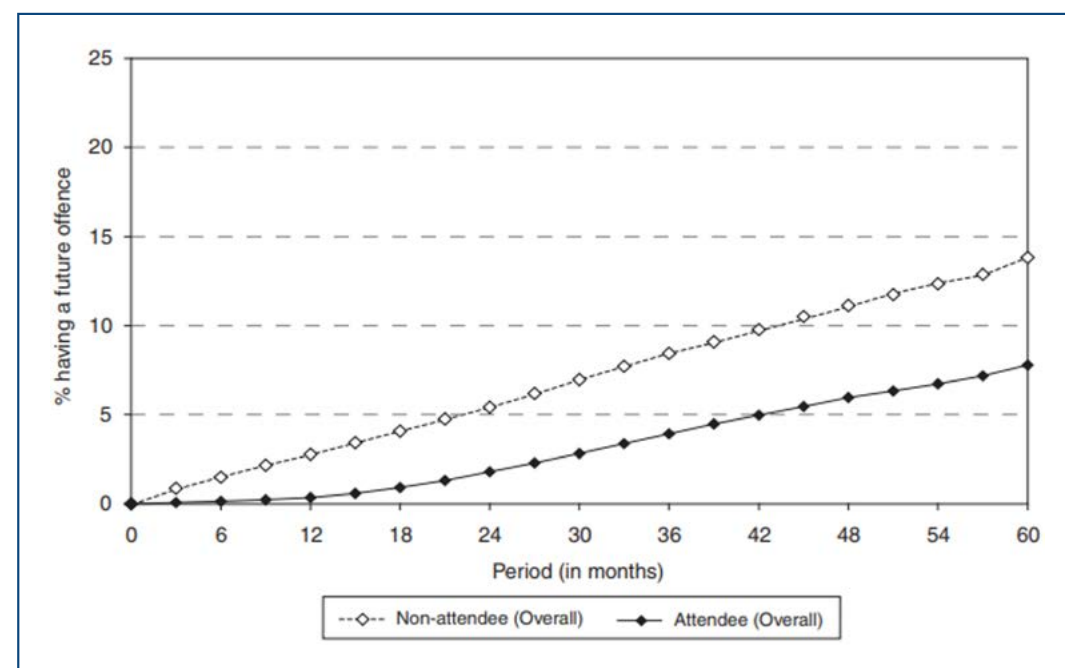
<sup>224</sup> North, P. (2010). *Report of the Review of Drink and Drug Driving Law*. Department for Transport.

<sup>225</sup> DVSA. (Undated). *Drink-drive rehabilitation scheme course syllabus*. DVSA.

<sup>226</sup> Davies, G., Harland, G., and Broughton, J. (1999). *Drink/driver rehabilitation courses in England and Wales*. TRL Report 426.



declared that they had drunk less alcohol than those who did not attend. Overall, 44% of those referred to a drink drive rehabilitation scheme had attended a course in the five years after sentencing. In 2007, TRL recommended that the Government consider refresher or top up courses, make course completion mandatory for those with drink drive convictions and run similar courses for driving instructors and new drivers.<sup>227</sup> These recommendations have not been implemented.



**Figure 19:** Percentage of offenders convicted of a further drink drive offence (TRL, 2007)

A concern raised with the UK rehabilitation course is its ability to accurately identify and offer appropriate help to those with alcohol and mental health problems. Some of the literature and interviews with experts on mental health suggests that drink drive courses should treat those with and without alcohol problems in separate programmes as they require separate interventions and treatments or at least offer separate treatments for those with alcohol and mental health problems.<sup>228</sup> This could be enabled by a more accurate way of identifying those with alcohol issues than those used by the current High Risk Offender scheme. Interviews with drink drivers conducted for this project also suggest that the alcohol and mental health problems which underlaid their decisions to drink drive were not considered in the drink drive rehabilitation course.

It should be noted that the current drink drive rehabilitation course is not designed to treat people with alcohol problems. Specifically the course recognises that many attending the course do not have a drink problem and 'it is not intended to be a therapeutic or clinical intervention.'<sup>229</sup> However, some studies of recidivist drink drivers suggest that because of the strong associations with alcohol consumption and recidivism, interventions such as alcohol treatment programmes are required to reduce future drink driving amongst this population.<sup>230</sup> Better providing for those with alcohol problems is also likely to reduce drink driving along

<sup>227</sup> Inwood, C., Buckle, G., Keigan, M., and Borrill, R. (2007). *Extended monitoring of drink-drive rehabilitation courses. Final report.* TRL Report 662.

<sup>228</sup> Schulze, H., Schumacher, M., Urmeew, R., Auerbach, K. (2012). *Final Report: Work performed, main results and recommendations.* DRUID.

<sup>229</sup> DVSA. (Undated). *Drink-drive rehabilitation scheme course syllabus.* DVSA.

<sup>230</sup> Freeman, J. et al. (2006). The self-reported impact of legal and non-legal sanctions on a group of recidivist drink drivers. *Transportation Research Part F: Traffic Psychology and Behaviour*, 9(1), 53-64.

with its other benefits. The course in its current form is also effective at reducing reoffending amongst attendees.

The current course may not be appropriate for those with mental health issues. Some providers use video of collisions or police responding to collisions on the course. Evidence shows that shock or 'blood and guts' videos are not effective road safety interventions.<sup>231</sup> Interviews with mental health experts suggest that this strategy is particularly ineffective and inappropriate for those with mental health issues. Interventions which aim to reduce drink driving should be psychologically informed. This means creating an environment for vulnerable people where staff are aware of needs and create a sense of safety, rather than traumatic experiences. Many courses and course trainers meet this standard now, but it is challenging and no specific training on this is required for course instructors or planners. The fact that the current drink drive course being less effective for those with alcohol or mental health issues is not an argument for removing it. The course is not aimed at this audience and it is effective at reducing reoffending. It reiterates the need to have alternative programmes and sentences for those with alcohol and mental health issues (as discussed in Medical Initiatives). However, as those with these issues do attend the course, and because it would not impact course effectiveness, course providers should routinely evaluate course content to ensure it is more psychologically aware and should remove content such as 'shock videos'.

The need for an effective rehabilitation scheme for people with alcohol or mental health issues has been further emphasised by the increase in the number of people with alcohol or mental health issues during the coronavirus pandemic.<sup>232</sup> These trends, combined with more people choosing to drive rather than use public transport and some evidence of increased drink driving from overseas,<sup>233</sup> shows the need for the Government to monitor this situation and be able to provide effective rehabilitation for people with alcohol and mental health issues.

*The government should consider providing specialist rehabilitation courses for drink drivers with serious alcohol or mental health issues.*

### 10.2.2 High risk offender scheme

People convicted of drink driving are in the high risk offender scheme if they have:

- been convicted of two drink driving offence within 10 years,
- were driving with an alcohol reading of at least 87.5 microgrammes of alcohol per 100 millilitres (ml) of breath, 200 milligrammes (mg) of alcohol per 100 ml of blood, or 267.5 mg of alcohol per 100 ml of urine,
- refused to give the police a sample of breath, blood or urine to test for alcohol, or
- refused to allow a sample of blood to be analysed for alcohol (for example, if the sample had been taken when they were incapable of giving consent).

Having been placed on the scheme an offender must reapply for their licence and pass a medical examination, which includes an examination with a doctor and a blood test. A DVLA doctor can then decide to accept or refuse the application or if alcohol dependency or misuse is uncertain can issue a medically restricted driving licence for up to three years after which the offender will have to submit to another medical examination. Experts interviewed

<sup>231</sup> Webster, E., and Norbury, F. (2019). Seat Belts: The forgotten road safety priority. PACTS.

<sup>232</sup> Mental Health Foundation. (2020). *Coronavirus: Mental Health in the Pandemic.* Mental Health Foundation. Sallie, S. et al. (2020). Assessing international alcohol consumption patterns during isolation from the COVID-19 pandemic using an online survey: highlighting negative emotionality mechanisms. *BMJ Open*, 10(1).

<sup>233</sup> NHTSA (2020). Road Traffic Deaths. NHTSA

by PACTS suggested that the HRO is a useful and practical scheme as it enables some dangerous driver to be prevented from regaining their licence until it is safe to do so, though it does have some issues (discussed below).

PACTS is not aware of any evaluation of the High Risk Offender scheme since studies conducted by TRL in 1999 and 2002. **These studies found that while the HRO scheme identified those at risk of reoffending, it was ineffective in curbing those risks and HROs were more likely to drink drive in the future and drive whilst disqualified.** vious three years whose future offending was similar to other drink drivers.<sup>234</sup> This suggests that either the HRO scheme is effective for those with high BACs but no recent previous offending, or that in the absence of recent previous offending having a high BAC is not a good predictor of the risk of drink driving in the future. Studies of BAC amongst Swedish drivers have found that BAC is a poor indicator of having alcohol problems and drink driving and is largely just a function of how long a time has passed between alcohol consumption, driving and a sample being taken.<sup>235</sup> The High Risk Offender scheme should be modified to more accurately identify those who are at high risk. This would include those who refused to provide a sample and those who had committed more than one drink driving offence in the last 10 years. Also included in the HRO could be those with alcohol issues who have been identified with a more accurate assessment than BAC.

**Interviews with experts in public health and alcohol treatment suggest that the alcohol use disorders identification (AUDIT) test would be an appropriate way of screening those convicted of drink driving.** AUDIT tests are already used by DVLA doctors when someone is applying to have their licence returned if they had it removed because of their alcohol issues. An approach which includes more accurate targeting and better treatment of vulnerable people with alcohol problems may be able to reduce drink driving amongst a hardcore of drink drivers who are unaffected by public information campaigns or police activity. The National Institute for Health and Care Excellence (NICE) recommends the use of AUDIT tests for the identification of alcohol use disorders and Severity of Alcohol Dependence Questionnaire (SADQ) tests for evaluating the severity of alcohol dependence. Both AUDIT and SADQ tests are simple forms of less than two pages. NICE also recommends that a comprehensive assessment should take place for adults who have been referred to alcohol services and have been identified as high risk by AUDIT. This would include an evaluation of co-morbidities such as mental health problems, drug use, historical and recent consumption patterns as well as other factors.

An alternative type of assessment, as recommended by the EU DRUID project, is diagnostic interviews to distinguish those with and without alcohol problems. While there have been fewer assessments of the accuracy of diagnostic interviews, discussions with experts suggest that, like AUDIT testing, diagnostic interviews would be significantly more accurate than the current HRO assessment based on BAC at identifying drink drivers who are more likely to drink drive in the future and who are most vulnerable and in need of support.

One significant issue with the current HRO scheme is that it offers no support to those on it. This means that while the scheme may identify many of those who are at risk of further reoffending, it has no impact on their likelihood of reoffending. The TRL study of the HRO scheme found that the drink drive rehabilitation course reduced future reoffending amongst HRO. However, they remain more likely to reoffend than other drink drivers and HRO are less likely to attend the course than other drink drivers. HRO are more likely to have alcohol

issues than other drink drivers and if improved screening were introduced this category would include the majority of drink drivers who have alcohol issues. While some drivers with alcohol issues are able to separate their drinking and driving, others are unlikely to be able to reduce their drink driving without addressing their alcohol issues. Interviews with experts on behaviour change and alcohol issues suggests that a successful scheme would require referrals to therapy or well-designed rehabilitation courses with the option of referrals to treatment services.

*Criteria for inclusion on the High Risk Offender Scheme should be re-evaluated with a broader set of criteria, including past convictions for drink driving, diagnostic interviews or completed Alcohol Use Disorders Identification Tests considered. A review of treatment options which could be made available for HRO scheme participants should be conducted.*

### 10.2.3 Medical initiatives and sentencing

Those with alcohol problems could be better identified and offered help by both legal and medical services. Repeat convictions for drink driving may be symptomatic of underlying problems of alcohol misuse or dependency and the legal process could provide an opportunity to screen for underlying alcohol problems.<sup>236</sup> It is possible that these repeat offenders represent a 'hardcore' of heavy drinkers who are less susceptible to police activity or public information. Better profiling and treating of this group is could be valuable in reducing drink driving.

Many of the drink drivers who had an alcohol problem who were interviewed for this project said that their alcohol problem was not mentioned or considered in court. Most believed this was because they did not look like a "typical" person with an alcohol problem.

*"Despite the fact I was four or five times – I was massively over the limit...I was very scared in court, because there was the risk I could get sent to prison by the magistrate, because of how over the limit I was. It was a bit of a joke. I think they probably looked at my age, they looked at the fact that I'd had a shave before I went into court. It hadn't crossed their mind that there might be an alcohol issue...I was classified as a high risk then. There was obviously some form of alcohol dependency, but that...funnily enough doesn't come up in court."*

(Jude, M, 46, Wales, DD conviction, in recovery (alcohol))

A few participants believed that they would have received a more lenient sentence if their problem had been acknowledged. One participant believed that they had received a lighter sentence because he was going to attend a reputable alcohol service while another participant stated that their alcohol problems were deliberately left out of their defence so they could receive a more lenient sentence. Many participants sought help for their alcohol problems through recovery services or centres, though only one reported that drink driving was discussed as part of their recovery and none reported being offered support for their alcohol problems during the legal process. The interviews also suggest that the underlying mental health issues many participants had, and which contributed to their drink driving were not taken into account by the judicial system. This suggestion is supported by two recent report which suggest that unless the underlying cause of a person's alcohol problem is addressed,

<sup>234</sup> Davies, G. et al. (1999). *The High Risk Offender Scheme for drink-drivers*. TRL. Broughton, J. (2002). *High Risk Offenders' reconviction patterns*. TRL.

<sup>235</sup> Hubicka, B., Laurell, H., and Bergman, H. (2005). Alcohol problems and blood alcohol concentration among Swedish drivers suspected of driving under the influence. *Contemporary Drug Problems*, 32(1), 387-401

<sup>236</sup> Calinescu, T., and Adminaite, D. (2018). *Progress in reducing drink driving in Europe*. ETSC. National Academies of Sciences, Engineering, and Medicine. (2018). *Getting to zero alcohol-impaired driving fatalities: A comprehensive approach to a persistent problem*. Washington, DC: The National Academies Press.

standard drink-driving penalties such as fines and temporary suspension from driving, are unlikely to deter them.<sup>237</sup> These reports recommend that people with alcohol addiction should be given intense treatment for their alcohol problems as part of the drink-drive rehabilitation process, and that rehabilitation programmes should be tailored to include education and counselling.<sup>238</sup> Further recommendations include assessing people with high BAC levels to preclude addiction and encouraging them to talk about alcohol with their family and friends, to avoid relapse.<sup>239</sup> Addressing the alcohol and mental health problems that underly some drink driving behaviour is vital in reducing drink drive reoffending.

High risk offenders are identified through the BAC when breathalysed or if they have reoffended in the last ten years. More on this system and potential alternatives is available in High Risk Offender Scheme. Admission to hospital for an alcohol impaired driving injury represents an opportunity to screen for underlying alcohol problems and refer for treatment.<sup>240</sup> Other chronic diseases, such as diabetes, are routinely screened for in hospital and have dedicated in-hospital specialist care teams. It has been suggested that routine universal screening for alcohol use disorders in hospitals would be justified. Routinely screening for these disorders amongst those who present to hospital or the legal system as a result of alcohol consumption seems appropriate.<sup>241</sup> This screening would allow for the easier identification and better care of a vulnerable population who are at higher risk of drink driving. Currently, convicted drink drivers may be signposted towards support for alcohol issues at drink drive courses. Signposting is not an effective way of providing support for people with mental health or alcohol issues and experts in alcohol treatment suggest that active support is a significantly more effective approach.

Of the drink drivers interviewed for this project, many who had a past alcohol problem were adamant that these problems needed to be dealt with to prevent drink driving, and that people with alcohol problems were likely to continue to drink drive unless their alcohol problem was addressed. Many suggested that alcohol recovery programmes should be combined with sentencing.

*“...they should be compelled and I don’t mean suggested, they should be compelled to begin with to do 90 meetings of some sort of twelve step programme or other form of, what’s the word, recovery programme that works for them...then go back to the court to report back how they felt afterwards.”*

(Jaxon, M, 57, Scotland, in recovery (alcohol))

Reviews of brief alcohol treatment programmes have found that they are effective for both treatment seekers and treatment non-seekers - those who sought treatment of their own accord and those who were referred by courts etc. The evidence of positive impacts of brief interventions was strongest where the intervention was based in primary care. Screening, and brief interventions for alcohol have been found to be a cost-effective strategy for health sector

organisations in the UK. While interventions, run online or virtually, have also been found to produce beneficial outcomes compared to controls they generally are not as effective as other brief interventions. Behavioural skill training and pharmacotherapy treatments have been found to be most effective, though other effective therapies include group psychotherapy and general alcoholism counselling. **The WHO suggests that motor vehicle crashes and fatalities can be reduced by brief advice and the mandatory treatment of drivers with alcohol dependency.**<sup>242</sup>

NICE recommends providing separate treatment to service users whose comorbid mental health problems do not improve after abstinence from alcohol. All interventions for people who misuse alcohol should be the subject of routine outcome monitoring. NICE recommends: ‘for harmful drinkers (high-risk drinkers) and people with mild alcohol dependence, offer a psychological intervention (such as cognitive behavioural therapies, behavioural therapies or social network and environment-based therapies) focused specifically on alcohol-related cognitions, behaviour, problems and social networks.’<sup>243</sup>

Care based programmes could also be run for those who have mental health problems which may have contributed, and continue to contribute, to their drink driving. Offenders can have their mental wellbeing assessed using tools such as the Warwick Edinburgh Mental Wellbeing Scale, a widely used questionnaire-based tool. Evaluations of mental health could then be used to link people into mental health services and provide care.

**Over the last ten years Liaison and Diversion services have been provided to identify people who have mental health, learning disability, substance misuse or other vulnerabilities when they first come into contact with the criminal justice system as suspects, defendants or offenders.** The service can then support people through the early stages of the criminal system pathway, refer them for appropriate health or social care or enable them to be diverted away from the criminal justice system into a more appropriate setting, if required.<sup>244</sup> Evaluation of these services have found them to be an effective part of the legal system; the programme rollout is expected to be complete in England by 2021. Funding for this service is provided directly by NHS England. Interviews with experts suggests that these services are not currently used for drink driving. Better integration of Liaison and Diversion services in drink driving could help provide better outcomes from the custody suite through to sentencing and offender management.<sup>245</sup>

While it is not possible to precisely quantify, a significant proportion of drink drivers have alcohol issues, and many are unlikely to stop drink driving unless they are addressed. *Where appropriate, treatment for alcohol issues should be included or incentivised in sentences for drink driving.*

#### 10.2.4 Alcohol interlocks

Interlocks test the driver’s alcohol level, normally through a breath test, and prevent the vehicle from starting if it is over a defined limit. Some interlocks require further tests during a journey or complicated techniques to use the device as a way of avoiding anyone other than the intended driver using the device. Interlocks are not currently used by UK courts, although they have been used across Europe, in Austria, Belgium, Denmark, Finland, France, Lithuania, the Netherlands, Poland, and Sweden.

<sup>237</sup> Schulze, H., Schumacher, M., Urmeew, R., Auerbach, K. (2012). *Final Report: Work performed, main results and recommendations*. DRUID.

Calinescu, T., and Adinaite, D. (2018). *Progress in reducing drink driving in Europe*. ETSC.

<sup>238</sup> Oshri, A., Carlson, M., Bord, S., and Zeichner, A. (2017). Alcohol-Impaired Driving: The Influence of Adverse Rearing Environments, Alcohol, Cannabis Use, and the Moderating Role of Anxiety. *Substance Use and Misuse*, 52(4): 507-517.

<sup>239</sup> Schulze, H., Schumacher, M., Urmeew, R., Auerbach, K. (2012). *Final Report: Work performed, main results and recommendations*. DRUID.

<sup>240</sup> National Academies of Sciences, Engineering, and Medicine. (2018). *Getting to zero alcohol-impaired driving fatalities: A comprehensive approach to a persistent problem*. Washington, DC: The National Academies Press.

<sup>241</sup> Robert, E., Morse, R., Epstein, S., Hotopf, M., Leon, D., and Drummond, C. (2019). The prevalence of wholly attributable alcohol conditions in the United Kingdom hospital system: A systematic review, meta-analysis and meta-regression. *Addiction*.

<sup>242</sup> Anderson, P., Moller, L., and Galea, G. (Eds.). (2012). *Alcohol in the European Union*. WHO.

<sup>243</sup> NICE (2011). *Alcohol-use disorders: diagnosis, assessment and management of harmful drinking (high-risk drinking) and alcohol dependence*. NICE

<sup>244</sup> <https://www.england.nhs.uk/commissioning/health-just/liaison-and-diversion/about/>

<sup>245</sup> <https://www.england.nhs.uk/commissioning/health-just/liaison-and-diversion/>



In the USA interlocks have been found to significantly reduce drink drive re-offending rates and alcohol related crashes when they are installed.<sup>246</sup> Studies have found that when interlocks are installed, drink drive recidivism is between 37% and 90% lower than amongst comparison groups who do not have devices fitted while a meta-analysis of studies of interlock effectiveness estimate that they reduce the risk of recidivism by 75% during the period that the interlock is operational.<sup>247</sup> Subsequent studies have also supported these findings of effectiveness.<sup>248</sup> The use of interlocks can also significantly reduce collision involvement when fitted. The rate of police reported collisions was 80% lower for participants in the Swedish interlock programme than in the preceding five years.<sup>249</sup> Interview data from those who had interlocks fitted also supports their effectiveness with interlocks being praised for providing a physical barrier to separate drinking from driving.<sup>250</sup>

The evidence on the effectiveness of interlocks at reducing drink driving after they have been removed is less clear. When combined with rehabilitation programmes, interlocks have cut reoffending rates after they have been removed.<sup>251</sup> The Swedish interlock programme combines the interlock with regular medical check-ups designed to alter alcohol use habits and reduces recidivism even after the interlock has been removed. The Swedish programme has also been shown to reduce sick leave and ill health amongst participants compared to a control group, likely because of reduced alcohol consumption.<sup>252</sup> The evidence indicates that when the interlock is used in isolation, the reduction in recidivism is limited to the period where the interlock is installed. It has been suggested that the efficacy of interlocks after removal could be improved by creating a criterion for interlock removal based on the ability of the user to control their drink driving using data from the interlock as a guide. This appears to be sensible suggestion, particularly as the rate of interlock BAC test above 0.02% strongly predicts the likelihood of a repeat drink drive offence.<sup>253</sup> Interlock programmes which also include rehabilitation programmes and in which removal is based on evidence of changes to drinking behaviour are effective at reducing recidivism both in the short and long term.

Voluntary interlock programmes were trialled in the UK in 2008 and currently by Durham Constabulary. The 2008 trial had some positive impacts with 172 potential drink drive trips prevented and positive feedback from interview data.<sup>254</sup> Issues were raised regarding the possibility of the interlock being circumvented by other people providing the breath sample - though the usual requirement of a complicated technique being used to use to interlock was removed for the field trial - and as the trial was voluntary the drop-out rate was high (43%). Interlocks have also been fitted across the National Express coach fleet following a successful two-year trial. A study of interlock use in commercial vehicle fleets in Sweden found that 0.2% of all vehicle starts were prevented by the device, generally during weekends and mornings.

On Saturday and Sunday mornings, 0.72% of drivers had an elevated BAC. The study found that 98% of companies which used interlocks would recommend them to other companies and that if the entire Swedish fleet of goods vehicles buses and taxis had interlocks installed around half a million drink driving journeys would be prevented each year.<sup>255</sup>

**Data provided to PACTS by the DVLA shows that, since 2010, 32,025 people who committed a drink drive offence had a previous drink/drug drive offence on their record. These 32,035 people committed 107,913 drink drive offences. This means 7% of those who committed a drink driving offence were reoffending and this 7% of offenders committed 17% of all drink drive offences.**

Similarly, at a European level, it has been suggested that small hardcore of drink drive offenders who are not influenced by traditional countermeasures account for 10% of offenders and are involved in two thirds of all alcohol-involved crashes.<sup>256</sup> Some research has also suggested that recidivists may be more likely to drive, and drink drive, when unlicensed. A study based on interviews with drink drive recidivists found that most respondents who had their licence revoked drove whilst under suspension, with employment and social factors as the key reasons. Interlock installation may provide an alternative to longer suspensions and therefore help prevent unlicensed driving and drink driving.<sup>257</sup> There are issues around interlocks regarding funding, participation and the rehabilitation programmes that could be run alongside the interlock being fitted. Interlocks are an intervention which may be able to prevent drink driving amongst high risk offenders as well as amongst the general offender population.

PACTS is undertaking a separate study on behalf of the Department for Transport into the feasibility of using alcohol interlocks in association with drink drive rehabilitation courses. This is due for publication in 2021.

### 10.3 Joint interventions

The literature is clear that drink driving is best targeted through a coordinated, systematic approach using multiple interventions in combination, including public health focussed interventions.<sup>258</sup> The evidence shows that both media campaigns and enforcement, including mandatory breath testing are more effective in combination,<sup>259</sup> a finding the North Report concurred with.<sup>260</sup> Changes to the drink drive limit are also likely to be more effective when combined with enforcement and publicity.<sup>261</sup> Similarly, interlock programmes are more effective at reducing reoffending rates when combined with rehabilitation programmes.<sup>262</sup>

<sup>246</sup> Houwing, S. (2016). *Alcohol Interlocks and Drink Driving Rehabilitation in the European Union*. ETSC

<sup>247</sup> Beirness, D., Clayton, A., Vanlaar, W. (2008). *An Investigation of the Usefulness, the Acceptability and Impact on Lifestyle of Alcohol Ignition Interlocks in Drink-Driving Offenders*. Department for Transport, Road Safety Research Report No. 88. Elder, R. et al. (2011). Effectiveness of Ignition Interlocks for Preventing Alcohol-Impaired Driving and Alcohol-Related Crashes. *American Journal of Preventive Medicine*, 40(3), 362-376.

<sup>248</sup> Bieuwkamp, R., Martensen, H., Meesmann, U (2017), Alcohol interlock, European Road Safety Decision Support System, developed by the H2020 project SafetyCube

<sup>249</sup> Bjerre, B., Marques, P., Selen, J., and Thorsson, U. (2007). A Swedish alcohol ignition interlock programme for drink-drivers: effects on hospital care utilization and sick leave. *Addiction*, 102(4).

<sup>250</sup> Beirness, D., Clayton, A., Vanlaar, W. (2008). *An Investigation of the Usefulness, the Acceptability and Impact on Lifestyle of Alcohol Ignition Interlocks in Drink-Driving Offenders*. Department for Transport, Road Safety Research Report No. 88.

<sup>251</sup> Houwing, S. (2016). *Alcohol Interlocks and Drink Driving Rehabilitation in the European Union*. ETSC

<sup>252</sup> Bjerre, B., Marques, P., Selen, J., and Thorsson, U. (2007). A Swedish alcohol ignition interlock programme for drink-drivers: effects on hospital care utilization and sick leave. *Addiction*, 102(4).

<sup>253</sup> Beirness, D., Clayton, A., Vanlaar, W. (2008). *An Investigation of the Usefulness, the Acceptability and Impact on Lifestyle of Alcohol Ignition Interlocks in Drink-Driving Offenders*. Department for Transport, Road Safety Research Report No. 88.

<sup>254</sup> Beirness, D., Clayton, A., Vanlaar, W. (2008). *An Investigation of the Usefulness, the Acceptability and Impact on Lifestyle of Alcohol Ignition Interlocks in Drink-Driving Offenders*. Department for Transport, Road Safety Research Report No. 88.

<sup>255</sup> Bjerre, B., and Jostela, J. (2008). Primary prevention of drink driving by the large-scale use of alcolocks in commercial vehicles. *Accident Analysis and Prevention*, 40(4), 1294-1299.

<sup>256</sup> Houwing, S. (2016). *Alcohol Interlocks and Drink Driving Rehabilitation in the European Union*. ETSC

<sup>257</sup> Lenton, S., Fetherston, J., Carcarelli, R. (2010). Recidivist drink drivers' self-reported reasons for driving whilst unlicensed – A qualitative analysis. *Accident Analysis and Prevention*, 42(1), 637–644.

<sup>258</sup> National Academies of Sciences, Engineering, and Medicine. (2018). *Getting to zero alcohol-impaired driving fatalities: A comprehensive approach to a persistent problem*. Washington, DC: The National Academies Press.

<sup>259</sup> Bergen, G., A. Pitan, S. Qu, R. A. Shults, S. K. Chattopadhyay, R. W. Elder, D. A. Sleet, H. L. Coleman, R. P. Compton, J. L. Nichols, J. M. Clymer, and W. B. Calvert. 2014. Publicized sobriety checkpoint programs: A community guide systematic review. *American Journal of Preventive Medicine* 46(5):529–539

Elder, R. W., R. A. Shults, D. A. Sleet, J. L. Nichols, R. S. Thompson, W. Rajab, and Community Preventive Services Task Force. 2004. Effectiveness of mass media campaigns for reducing drinking and driving and alcohol-involved crashes: A systematic review. *American Journal of Preventive Medicine* 27(1):57–65.

McCart, A. T., L. A. Hellinga, and J. K. Wells. 2009. Effects of a college community campaign on drinking and driving with a strong enforcement component. *Traffic Injury and Prevention* (2):141–147

<sup>260</sup> North, P. (2010). *Report of the Review of Drink and Drug Driving Law*. Department for Transport.

<sup>261</sup> Nagata, T., Hemenway, D., and Perry, M. (2006). 'The Effectiveness of a New Law to Reduce Alcohol-impaired Driving in Japan. *JMAJ*, 49(11): 365-369.

Nagata, T., Hemenway, D., and Perry, M. (2006). 'The Effectiveness of a New Law to Reduce Alcohol-impaired Driving in Japan. *JMAJ*, 49(11): 365-369.

<sup>262</sup> Houwing, S. (2016). *Alcohol Interlocks and Drink Driving Rehabilitation in the European Union*. ETSC

The effectiveness of joint programmes of interventions is also illustrated in the examples of Estonia and Denmark, two countries with a strong record of reducing drink driving through programmes which included both public health and conventional road safety strategies. Estonia cut drink driving deaths by 89% between 2006 and 2016 through a comprehensive policy against drug driving which included low blood alcohol limits, widespread random breath testing, publicity campaigns and the highest level of drink drive enforcement in the EU. Denmark cut drink drive deaths from 112 in 2007 to 30 in 2016. This was attributed to increases to sanctions, increased numbers of random controls, no-alcohol policies in workplaces, media campaigns and alcohol rehabilitation offered by employers.<sup>263</sup>

Some programmes which included public health messaging alongside drink have also been run in the UK and in the Isle of Man (as discussed in 15.1.5 'Alternative Transportation'). Drink Wise, Age Well is a programme run by a UK wide partnership and led by Addaction, which runs programmes around alcohol use aimed at older people in local authority areas across the UK. The programme offers guidance on drinking in workplaces, including on drink driving, as well as in the community more broadly. Combining public health practices with conventional road safety initiatives can help address the alcohol issues which lead some to drink drive, while also reducing drink driving amongst those without alcohol problems. This combined approach is essential if we are to reduce drink drive deaths to zero in the UK.

*The significant impact of combined approaches to drink driving, which include enforcement and education campaigns alongside public health policies, should be recognised and viewed as potential models for reducing drink driving in the UK.*

<sup>263</sup> Calinescu, T., and Adinaite, D. (2018). *Progress in reducing drink driving in Europe*. ETSC.

## CHAPTER 11

# Conclusion





Drink driving remains a significant cause of death and serious injury on UK roads. The lack of progress over the last ten years shows that current drink driving interventions are not making sufficient inroads and that new policy initiatives are required.

This report reiterates the role of conventional road safety measures in reducing drink driving. High levels of enforcement, which lead to high public perceptions of enforcement, remain one of the most significant single tools which can be used to reduce drink driving. However, significant cuts to roads policing have led to large reductions in drink drive enforcement with fewer breath tests carried out. Increasing the level of enforcement, particularly if the police are given the power to conduct mandatory tests and make use of mobile evidential breath test instrument when they become available, would significantly reduce drink driving. Media campaigns also have a role to play by amplifying drivers' awareness of enforcement. Behaviour change campaigns may also have a positive effect if effectively targeted, but rigorous assessment is needed to assess their impact of drink driving behaviour. A "zero" limit for drivers can also help improve public understanding of drink driving and should be introduced, at a minimum for professional and young and novice drivers.

This report also shows that alcohol and mental health issues contribute to drink driving and that an approach which combines public health strategies alongside conventional road safety interventions, is likely to be most effective at reducing the number of drink drive deaths.

Not all drink drivers have alcohol issues but alcohol issues do lead to many people drink driving. These drink drivers are unable to separate their need to drink from their need to drive and as a result, unless their alcohol issues are addressed are unlikely to stop drink driving. A reformed High Risk Offender Scheme, based on a broader, more accurate set of criteria including diagnostic interviews or and Alcohol Use Disorders Identification Test can better identify those with alcohol issues. Furthermore, including treatment for alcohol issues in drink driving sentences, where appropriate, can ensure that vulnerable people are offered support and help reduce reoffending. More broadly, this report shows the importance of public health programmes and perspectives in drink driving. Drink driving should be considered in discussions of policies aimed at reducing alcohol harm and these interventions on drink driving should be monitored. Medical professionals can play a vital part in identifying those with alcohol issues which may lead them to drink drive. However, the evidence suggests that there is a need to raise awareness amongst medical professionals of GMC, and other relevant professional bodies, guidance on informing the DVLA of patients' alcohol issues. During the coronavirus pandemic the number of people with alcohol and mental health issues has increased, road use remained high and public transport use decreased. This raised significant concerns about the impact of the pandemic on drink driving, both currently and moving forward.

Above all, this report demonstrates the need for a broad, coherent strategy for reducing drink driving, including both public health and conventional road safety interventions. This strategy should address the underlying causes of peoples' decisions to drink drive, significantly increase drivers' perception of their chance of being caught if they do drink drive, and offer support for vulnerable people.

## CHAPTER 12

# Summary of recommendations





The reasoning and conclusions which lead to these recommendations are set out at length above. The recommendations are repeated here for convenience.

#### **Wide-reaching review of policy**

- 1 The Department for Transport, in collaboration with the Department for Health, the Home Office and the Ministry of Justice, should undertake a wide-reaching review of policy on drink driving, taking account of the evidence and recommendations in this report.

#### **A multisectoral approach**

- 2 The road safety community and public health sector should be more aware of the relationships between drink driving, alcohol and mental health issues. Alcohol and mental health issues should be considered when planning interventions aimed at reducing drink driving.
- 3 The significant impact of combined approaches to drink driving, which include enforcement and education campaigns alongside public health policies, should be recognised and viewed as potential models for reducing drink driving in the UK.

#### **Drink Drive Limit**

- 4 A “zero” (0.2) limit should be introduced in the UK, at a minimum this limit should be introduced for professional drivers and for young and novice drivers.
- 5 The Department for Transport should undertake further monitoring of the experience of the reduction of the drink drive limits in Scotland and, when implemented, Northern Ireland.

#### **Enforcement and the Courts**

- 6 The police should plan how they will deploy mobile evidential breath testing instruments (“roadside tests”) which may be available from 2022. In collaboration with other agencies, this should include consideration of any new duty of care that may arise, and appropriate procedures.
- 7 The downward trend in the level of drink drive enforcement should be reversed.
- 8 Police should be given the powers to conduct mandatory alcohol testing.
- 9 forces should target enforcement on the basis of the profile of drink drivers, either nationally or preferably in their police force area; for example, increasing drink drive enforcement in the evenings and on weekends.
- 10 Breath tests should be conducted on all those suspected of drug driving, even if they have failed a drug wipe test.
- 11 Magistrates should be made aware of the increased danger posed by drivers who have consumed both drink and drugs.
- 12 More severe sentences (such as inclusion on a High Risk Offender Scheme) should be given to those who are both drink and drug driving.
- 13 The heightened risks of fatal and serious casualties from multiple risky behaviours, such as failing to wear a seat belt while drink driving, should be recognised and addressed in enforcement activity.

#### **Messaging, Education, and Media**

- 14 Media campaigns designed to amplify drivers’ perception of levels and effectiveness of enforcement activity should be run alongside enforcement campaigns. These should reflect the diversity of drink drivers and situations in which people drink drive.
- 15 Behaviour change campaigns, using social media etc, should be assessed in relation to their impact on reducing drink driving and casualties.

#### **Fleet Safety**

- 16 Companies, and others with responsibility for those who drive for work, should develop strong drink drive policies, including education, testing and enforcement. This should include smaller fleets, “grey fleets” and “gig” workers.

#### **Alternative Transport Provision**

- 17 The benefits and cost-effectiveness of alternative transport provision, such as night-time public transport or taxis/private hire entry, on drink driving in the UK should be investigated.

#### **Public Health and Alcohol Treatment**

- 18 Awareness of guidance for medical professionals (and others) and the duty to inform the DVLA of a patient’s alcohol issues should be raised.
- 19 The impact on drink driving of public health interventions aimed at reducing alcohol harms should be monitored. Potential reductions in drink driving should be included in discussion of policies aimed at reducing alcohol harm.
- 20 The government should consider providing specialist rehabilitation courses for drink drivers with serious alcohol or mental health issues.
- 21 Criteria for inclusion on the High Risk Offender Scheme should be re-evaluated with a broader set of criteria, including past convictions for drink driving, diagnostic interviews or completed Alcohol Use Disorders Identification Tests considered.
- 22 A review of treatment options which could be made available for HRO scheme participants should be conducted.
- 23 Where appropriate, treatment for alcohol issues should be included or incentivised in sentences for drink driving.

#### **Drink drive levels – a better evidence base**

- 24 The Department for Transport should investigate the feasibility of conducting a national roadside survey to determine the true levels of drink (and drug) driving.

# Appendix 1:


## Search terms

Initial searches were made for ‘drink driving’ (1,507,083 results), ‘drink driving interventions’ (328,439), ‘drink drivers’ (1,262,286), ‘drink driving alcohol issues’ (334,861), ‘drink driving alcohol problems’ (375,346), ‘drink driving rehabilitation’ (150,386), ‘alcohol issues diagnosis’ (352,032), ‘alcohol issues treatment’ (856,652), ‘alcohol problems diagnosis’ (403,928), ‘alcohol problems treatment’ (1,047,750), ‘drink driving education’ (558,767), ‘drink driving public health’ (559,496) and ‘drink driving enforcement’ (231,041). Number of results returned is from ProQuest. Other more specific searches were made throughout the research process.

# Appendix 2

## Appendices to the University of Stirling/ Dundee Methodology

### Appendix 2.1: Publicity ad for recruiting participants



### Do you have personal experience of drinking and driving?

**Why?** Our new study aims to better understand what leads people to drink and drive, their experiences, how they view the risks, and what can be done to reduce it.

**Who can take part?** We want to hear from people who have driven after having drunk alcohol on more than one occasion, OR who have been caught drink-driving in the past.

**What is involved?** We will invite you to take part in an interview over the telephone or at a place that suits you. Your name and identity, and everything you say will be kept confidential at all times. As a thank you, we will offer you a £30 Love2Shop voucher.

If you’re interested in taking part, please contact us to find out more:  
Andrea on xxxxxxx  
Email: [stirdrinkdrivestudy@gmail.com](mailto:stirdrinkdrivestudy@gmail.com)

### Appendix 2.2: Screening questionnaire to assess participant eligibility

Supporting document 2.4 – Screening questionnaire to assess participant eligibility

We are very grateful to you for your interest in our study. Below we have asked some questions that would help us know if you match the criteria for taking part in our study. The questionnaire will only take about 5 minutes to complete. Please note that your answers to this questionnaire will be kept confidential and shared only within the research team. Thank you again!

1. Gender: Female ☐ Male ☐ Non-binary ☐ Prefer not to say ☐

2. Age: 18-25 ☐  
26-35 ☐  
36-45 ☐  
46-55 ☐  
56-65 ☐  
66-75 ☐  
Over 75 ☐

3. What is driving status? Never driven\* ☐ Current driver ☐  
Suspended/Previous Driver ☐  
*\*If the person has never driven, they are NOT eligible to take part in the study.*

4. Have you ever had a drinking problem? Yes ☐ No ☐

5. Would you say that you currently have a drinking problem? Yes ☐ No ☐

6. Have you ever been convicted of drink-driving Yes ☐ No ☐

7. When you were drinking and driving in the past, would you say that you were drinking and driving regularly?\* (Please note that your answers to these questions will be kept confidential and shared only within the research team).  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*\*If answer to questions 6 AND 7 is no, then the participant is NOT eligible to participate in the study.*

8. How did you hear about the study? \_\_\_\_\_

9. Home/email address: \_\_\_\_\_

10. Contact number: \_\_\_\_\_



## Appendix 2.3: Interview guide for participants who have been convicted of drink driving

### Supporting document 3.2 - Interview guide for participants who have been convicted of drink-driving

#### Introduction (5mins)

- Introduce yourself (including University details) and thank the person for taking the time to participate in the interview. If two interviewers are present, make sure that both introduce themselves, and ensure the participant is ok with having two people present to do the interview.
- Check that the participant has sufficient time (up to one hour) and that there is sufficient privacy where they are (if done over the phone).
- Recap purpose of study
  - *The aim of this study is to understand the experiences and views of people who have been convicted of drink-driving, and who have drunk and driven on more than one occasion. I/We am/are interviewing you today, because when you last spoke to me/my colleague [name person], you mentioned that you were convicted of drink-driving. I/We am/are only interested in learning about you and the circumstance that have led to you drinking and driving, and how you feel about this. Everything you say will be kept confidential and we will not identify you in any results and reports from this study. You are free to stop the interview at any point if you feel that no you no longer wish to continue, and can also ask us to suspend the recording to take a break at any point. We cannot give you any advice on any specific problems, but we can signpost you to groups/services who can help you with any issue or concern you may have. Before we start, are there any questions you would like to ask me/us?*
- Check if the participant has any questions before proceeding.

#### Consent (if written consent not provided in advance) (5 mins)

If consent provided in advance:

- reiterate confidentiality and voluntary nature, including that they can withdraw any time without reason
- ask the participant if you may turn on the recorder to audio-record their consent

If conducting the interview by phone:

- ask the participant if you may turn on the recorder to audio-record their consent
- Use a few recall questions to test their understanding of what they are consenting to (please refer to the San Diego Brief Assessment of Capacity to Consent)
- if the participant's ability to consent is limited, then do not do the interview
- obtain final verbal consent to do the interview
- Complete the researcher section of the form on page 2 before proceeding with the interview.

#### 1. Participant background (5-10 mins)

- a. How are you feeling today? Is this a busy day for you? Etc.
- b. Can you tell me a little bit about yourself? *This is optional – participant may wish to be anonymous.*
- c. Can you tell me a little bit about your personal drinking? *Prompt: what type of alcohol do they like to drink; how often they drink; where do they drink and with whom?*

*Only If person mentions that they have/had a drinking problem, ask questions d -f. If no mention, the proceed to question 2.*

- d. Have you ever received support or treatment for your alcohol/drinking problem? If yes, can you tell me about any rehabilitation/support group that you belong(ed) to? How long have you been a member of this group?
- e. What has brought you to the group? *Prompt: was it recommended and by whom; is it voluntary? What support/treatment is provided?* Do you think being in the group is justified/necessary/helpful?
- f. Do you think being in the group is necessary? Have you found that it has helped you with your alcohol problems?

#### 2. Personal drinking and driving behaviour (15 mins)

Can you tell me the story of how you came to have drink-drive conviction? I am really interested in understanding the events surrounding it, for example, when did it happen and where you were at the time. *If the participant has more than one conviction, go through each one, starting from the most recent, and use the following prompts to gain as much information on the circumstances surrounding their conviction:*

- *What time of day did the event that led to the conviction occur?*
  - Immediately after a night out
  - Morning after
- *Where was the participant doing before this and what was the occasion?*
  - Home
  - Other venue e.g. par, pub, restaurant, wedding venue
- *What was the participant drinking; how much did they have to drink*
- *Were they drinking with anyone? Were these companions aware that the participant had been drinking, and planning on driving?*
- *Did they plan on driving; did they feel safe to drink and then drive; how did they judge/decide this?*
- *What happened when they were stopped?*



- *were they breathalysed/reported by someone*
- *were they alone when stopped*
- *what happened e.g. test was negative/positive; went to the police station to provide another sample*
- *were there any injuries to self/other people or damage to car/property*
- *what were the police's response/reactions*
- *what were their reaction/how they felt when they were stopped.*

### 3. Consequences of drink-driving (15 mins)

I would now like to understand what happened after you were convicted of drink-driving.

- a. Can you tell me about the consequences of your conviction, for example, what penalties did you receive? Did you think these consequences were fair?
  - *Disqualified from driving for a specified time*
  - *Car taken away for a specified time*
  - *If the participant indicates that they may have a drinking problem, ask if they have ever given help as a result of the conviction. If yes, was this something they wanted? If no, would they have wanted help?*
- b. Can you tell me how you felt after you received the conviction? Was anyone who is close to you aware of what had happened? How did they feel, and how did their knowing and reaction make you feel?
- c. If you could rewind time, what do you think may have prevented you from drinking and driving? Do you think there is any safe limit for driving?

### 4. Drink-driving in general (5 mins)

- a. What do you think about when you hear the term 'drink-driving' or 'drink-driver'? Do you consider yourself do be a drink-driver? Why do you think this?
- b. What do you think society's view is on drink-driving?

### 5. Last thoughts

- a. Finally, is there anything that I have not asked, that you would like to mention?

### Debrief (5 mins)

- Thank participant for their time, and ask which address they would like the vouchers sent to.
- Ask if they would be interested in being send the findings of the study, and if yes, what would be the best way to send the findings to them.
- If participant has mentioned any issues with alcohol/drink-driving/health, please signpost them to the following:
  - Alcohol problems: Alcoholics Anonymous (AA) - <https://www.alcoholics-anonymous.org.uk/>, 0800 9177 650, email: [help@aamail.org](mailto:help@aamail.org)
  - Mental health: Samaritans – 116 123, email: [jo@samaritans.org](mailto:jo@samaritans.org) or visit a branch to speak face-to-face AND/OR Breathing Space (Scotland) - 0800 83 85 87



## Appendix 2.4: Interview guide for participants with current/previous alcohol problems, or people who occasionally drink, who do not have a conviction but who drink and drive



### Supporting document 3.3 - Interview guide for participants with current/previous alcohol problems, or people who occasionally drink, who do not have a conviction but who drink and drive

#### Introduction (5 mins)

- Introduce yourself (including University details) and thank the person for taking the time to participate in the interview. If two interviewers are present, make sure that both introduce themselves, and ensure the participant is ok with having two people present to do the interview.
- Check that the participant has sufficient time (up to one hour) and that there is sufficient privacy where they are (if done over the phone).
- Recap purpose of study
  - *The aim of this study is to understand the experiences and views of people who have drank and driven on more than one occasion. I/We am/are interviewing you today, because when you last spoke to me/my colleague [name person], you mentioned that this is something you have done in the past. I/We am/are interested in learning about you and the circumstances that have led to you drinking and driving, and how you feel about this. Everything you say will be kept confidential and we will not identify you in any results and reports from this study. You are free to stop the interview at any point if you feel that no you no longer wish to continue, and can also ask us to suspend the recording to take a break at any point. We cannot give you any advice on any specific problems, but we can signpost you to groups/services who can help you with any issue or concern you may have. Before we start, are there any questions you would like to ask me/us?*
- Check if the participant has any questions before proceeding.

#### Consent (if written consent not provided in advance) (5 mins)

##### If consent provided in advance:

- reiterate confidentiality and voluntary nature, including that they can withdraw any time without reason
- ask the participant if you may turn on the recorder to audio-record their consent

##### If conducting the interview by phone:

- ask the participant if you may turn on the recorder to audio-record their consent
- Use a few recall questions to test their understanding of what they are consenting to (please refer to the San Diego Brief Assessment of Capacity to Consent)
- if the participant's ability to consent is limited, then do not do the interview
- obtain final verbal consent to do the interview
- Complete the researcher section of the form on page 2 before proceeding with the interview.



#### 1. Participant background (5-10 mins)

- a. How are you feeling today? Is this a busy day for you? Have you got a lot planned for today? Thanks for giving us some of your time Etc.
- b. Can you tell me a little bit about yourself? *This is optional – participant may wish to be anonymous.*
- c. Can you tell me a little bit about your personal drinking? *Prompt: what type of alcohol do they like to drink; how often they drink; where do they drink and with whom?*

*Only if person mentions that they have/had a drinking problem, ask questions d -f. If no mention, the proceed to question 2.*

- d. Have you ever received support or treatment for your alcohol/drinking problem? If yes, can you tell me about any rehabilitation/support group that you belong(ed) to? How long have you been a member of this group?
- e. What has brought you to the group? *Prompt: ask about their current/previous alcohol problem (how much alcohol they consume and how frequently); was the group recommended to them and by whom; is it voluntary; what support/treatment is provided?*
- f. Do you think being in the group is necessary? Have you found that is has helped you with your alcohol problems?

#### 2. Personal drinking and driving behaviour (15 mins)

Can you tell me the story a time in which you have drank and then driven? I am really interested in understanding the events surround it, for example, when did it happen and where you were at the time, and if you think your personal current or past alcohol problems have played a part in this. *If the participant has said that they have drank and driven on more than one occasion, go through each one, starting from the most recent, and use the following prompts to gain as much information on the circumstances surrounding the circumstances of each time:*

- *What time of day did the drink-driving occur?*
  - *Immediately after a night out*
  - *Morning after*
- *Where was the participant doing before this and what was the occasion?*
  - *Home*
  - *Other venue e.g. par, pub, restaurant, wedding venue*
- *What was the participant drinking; how much did they have to drink*



- Were they drinking with anyone? Were these companions aware that the participant had been drinking, and planning on driving?
- Did they plan on driving; did they feel safe to drink and then drive; how did they judge/decide this?
- Do they think their current/past alcohol problems had an influence on this occasion or in general?

### 3. Consequences of drink-driving (15 mins)

I would now like to understand what happened after you drank and drove.

- Can you tell me about any consequences that have resulted from the drink-driving occasion you mentioned earlier?
  - Injury to self/other people
  - Damage to car/other property
  - If the participant indicates that they may have a drinking problem, ask if they have ever sought help/treatment/support for this (and if they did, ask for details e.g. from their GP, community group, etc).
- Can you tell me how you felt after you the occasion you mentioned before? Was anyone who is close to you aware of that you had drank and driven? How did they feel, and how did their knowing and reaction make you feel?
- If you could rewind time, what do you think may have prevented you from drinking and driving? Do you think there is any safe limit for driving?

### 4. Drink-driving in general (5 mins)

- What do you think about when you hear the term 'drink-driving' or 'drink-driver'? Do you consider yourself do be a drink-driver? Why do you this this?
- What do you think society's view is on drink-driving?
- Finally, is there anything that I have not asked, that you would like to mention?

### Debrief (10 mins)

- Thank participant for their time, and ask which address they would like the vouchers sent to.
- Ask if they would be interested in being send the findings of the study, and if yes, what would be the best way to send the findings to them.
- If participant has mentioned any issues with alcohol/health, please signpost them to the following:

- Alcohol problems: Alcoholics Anonymous (AA) - <https://www.alcoholics-anonymous.org.uk/>, 0800 9177 650, email: [help@aamail.org](mailto:help@aamail.org)
- Mental health: Samaritans – 116 123, email: [jo@samaritans.org](mailto:jo@samaritans.org) or visit a branch to speak face-to-face AND/OR Breathing Space (Scotland) - 0800 83 85 87

## Appendix 2.5: Coding framework

**Table 2** – Coding framework derived from inductive coding of participants' responses

NAME	DESCRIPTION
<b>1 Experiences of recovery</b>	<b>Narratives around a person's journey to recover from alcohol dependence or addiction, even if they have not yet stopped drinking.</b>
1.1 Experiences with recovery groups or services	Views/opinions/perspectives on recovery groups or services to help the person overcome their dependence/addiction. Includes medical treatment received from hospitals.
1.2 Other experiences or perspectives on a person's recovery journey	Any other narrative around a person's recovery journey, including the challenges, barriers, motivators or facilitators a person faced during their recovery journey.
<b>2 Reasons for drinking linked to a drink driving event</b>	<b>Narratives describing or explaining the reasons for a person's drinking before they were involved in a drink driving event such as an (i) accident; (ii) driving erratically; (iii) being reported, stopped, caught; or (iv) not being caught.</b>
2.1 Drinking triggered by mental health issue	Person's drinking had been triggered by an underlying mental health issue or past traumatic event. This includes bereavement.
2.1.1 Using alcohol as a coping mechanism or being triggered to drink alcohol	Narratives around using alcohol to cope or avoid having to deal with a mental health issue or trauma, or having a mental health condition that triggered drinking
2.1.2 Other experiences or perspectives on a person's mental health or trauma	Any other narrative related to the person's mental health or trauma. This includes how the impact of this issue/trauma on their lives and the support they received, or lack of support not given to help them deal with this issue.
2.1.3 Drinking patterns	Drinking patterns or habits because of mental health problem
2.2 Drinking due to alcohol dependence	Person had been drinking continuously or binge drinking as a result of being dependent of alcohol.
2.2.1 Drinking patterns	Description on a person's drinking patterns while being dependent or addicted to alcohol.
2.2.2 Impact on personal, social and work life	How a person's alcohol dependence or addiction affects their personal life including their emotions, behaviours and health, and their social and work life including their relationships with other people.
2.2.3 Other people's attitudes and behaviours	The person's own perspective of how other people around them behaved or reacted to the person's alcohol dependence or addiction.
2.2.4 Other	Any other narratives around becoming and being dependent or addicted to alcohol not coded above.
2.3 Drinking socially with family, friends or colleagues	Person was drinking socially either with family, friends or colleagues.
2.4 Justification for drinking and driving	People's reasons for justifying why drink driving occurred. People's reasons for justifying why drink driving occurred. Narratives around whether someone had planned to drive after drinking.
2.5 Other	Any other narratives around the circumstances that led to a drink driving event not coded above.



NAME	DESCRIPTION
<b>3 Drink driving event and consequences</b>	<b>Narratives around the details of the drink driving event and the emotional, mental and physical consequences that arose immediately or sometime after a drink driving event, even if the person was not caught. This includes injury to self or others, or damage to property (e.g. car, house, etc.)</b>
3.1 Circumstances of drink driving event	Descriptions of the drink driving event, even if the person was not stopped or caught.
3.2 Emotional, behavioural or mental health consequences	Any emotional, behavioural or mental health impact as a result of causing a drink driving event or drinking and driving. This includes feelings of shame, embarrassment, anger, frustration, being afraid, anxiety, depression, etc. This also includes stopping drink driving or stopping drinking.
3.3 Physical consequences	Any injury to self or other people, or any structural damage to someone's property such as a car or house, that happened as a result of a drink driving event.
3.4 No consequences	No consequences as a result of the drink driving event or drinking and driving. Includes experiences of being stopped but not charged when drink driving.
3.5 Other	Any other narratives around the consequences of the drink driving event not coded above.
<b>4 Experiences of being caught or arrested for drink driving</b>	<b>Narratives around the actions, emotions and perspectives on being caught and arrested by the police following a drink driving event. This incorporates the time from being stopped, breathalysed, taken to the police station and being released the following day.</b>
4.1 Events that occurred	Any events that occurred as a result of a person being caught and arrested for drink driving by the police or other individuals. This includes being stopped, breathalysed, booked, kept overnight at the police station, etc. N.B. any narratives around the police's reactions or treatment of an individual should be coded in 3.2.
4.2 Behaviours of the police	Narratives around how the police reacted or behaved during or after arresting the individual for drink driving.
4.3 Reactions of others upon knowing of drink driving event	How other people (excluding the police) reacted to finding out that the individual had been arrested for drink driving OR drank and driven without being caught.
4.4 Other	Any other narratives around the experiences of being caught and arrested for drink driving not coded above.
<b>5 Experiences with drink driving sentencing</b>	<b>Narratives around people's experiences, attitudes or beliefs that relate to receiving a drink driving sentence.</b>
5.1 Opinions about sentence received for drink driving	Any opinion/view/perspective the person has about the drink driving sentence they received, or about sentences received by others. This includes opinions on fairness, disapproval, etc.
5.2 Experiences with court or probation	Any narratives around a person's experiences with going to court to receive a sentence (temporary sentence or final). This includes any (i) legal advice, (ii) support received by or given to the person during the period leading up to, during or after receiving a drink driving sentence, (iii) experiences with a probation officer.
5.3 Other	Any other narratives around the experiences with drink driving sentencing not coded above.
<b>6 Experiences with drink driving rehabilitation course</b>	<b>Narratives around people's experiences of attending a drink driving rehabilitation course. This also includes any narratives around not attending the rehab course.</b>

NAME	DESCRIPTION
6.1 Reasons for attending drink drive rehab course and opinions of the course	The reasons a person gives for attending or not attending the rehab course. Also code here a person's overall opinions, views or perspectives of the rehab course. This includes their initial expectations of the course and how these may have changed once on the course.
6.2 Changes in knowledge and behaviour of the effects of alcohol resulting from attending the course	Any changes in a person's knowledge or awareness of the effects of alcohol on the body. Also code any changes in a person's drinking and/or driving behaviour as a result from attending the rehab course.
6.3 Other	Any other narratives around the experiences with a drink driving rehibition course not coded above.
<b>7. Views, attitudes and practices regarding drinking and driving</b>	<b>Narratives around a person's views and attitudes regarding drinking and driving, and practices in relation to this.</b>
7.1 Self-perception of being a drink driver	Any narrative around a person's perspective on them being a drink driver or not, either previously or currently.
7.2 Views about other people's drinking and driving	A person's views/opinions/perspectives about the drink driving behaviour of other people that they know. This includes whether the person considers these individuals to be drink drivers, and how the opinions they have about these people.
7.3 Society's views on drinking and driving	A person's views/opinions/perspectives about how society views drinking and driving, and society's drinking and driving behaviour in general.
7.4 Other	Any other narratives around the views, attitudes and practices regarding drinking and driving not coded above.
<b>8. Preventing drink driving</b>	<b>Narratives around a person's views/opinions/perspectives on what prevented or could have prevented them or other people from drinking and driving. This includes views on what could prevent people from drinking and driving in general.</b>
8.1 Knowledge of alcohol content	Views on how having accurate knowledge of blood alcohol content or alcohol content of a drink could prevent someone from drinking and driving.
8.2 Intervention from another person	Views on how an intervention from another person such as a friend, colleague, family member or other individual, could prevent someone from drinking and driving. Interventions could include being physically stopped from drinking or driving, talking, receiving counselling or treatment for alcohol dependency or mental health issue.
8.3 Having a zero drink driving limit or zero tolerance	Views on how having a zero drink driving limit could prevent someone from drinking and driving.
8.4 Nothing works	Views on how nothing could prevent someone from drinking and driving.
8.5 Other	Any other narratives around preventing drink driving not coded above.
<b>9 Opinions or experiences of drug-driving</b>	<b>Any narratives around a person's opinion or experiences of drug-driving.</b>



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